The impact of the Chinese reforms of 1978 in the Chinese economy and society

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1. Introduction

The situation in China produces a great interest due to the spectacular economic growth and a social change that has high relevance.

The global influence in this Asian country can be appreciated if we consider that China is still the main world producer and consumer of most of the industrial and agricultural key products.

The Maoist period was a change of social plans, and it registered a notable economic accomplishment but it left some problems. After the Maoist period came the reforms, agricultural, industrial and political. These reforms made a big growth, a structural change and a fast improvement in the quality of life. At the end of the 70s the prices of the majority of products were intervened by the State, in a planned economy, and the inexistence of private initiative, led all the economic weight to the public companies, that were inefficient due to the lack of competitiveness, technology and professional advisors.

The transformations in economic growth during the years and the effects in the economy will be seen now. Specifically, China will be compared with other two important economies of the world (India and the U.S.), to see if the changes have been for better or worse.

After India got independence from colonial rule in 1947, the economic rebuilding started. As in China, there was a five year plan for the development of the economy, which came into implementation in 1952. The agriculture received the immediate attention from the Indian government and the industrial sector was quickly developed to provide employment to the growing population. The tax reforms, the opening to foreign investments and liberalization of trade and finance were some changes that helped Indian economy to gain momentum.

India will be useful for us as a basis for comparison, due mainly to its economic dynamics, population size, structural changes and the possible implications of trends for the regional and global economy. Both countries show growth rates among the highest in the world and their populations represent more than a quarter of the world. That is why their developments have become a matter of comparisons.

The U.S. will also take part in the comparison as in the last years they have been very successful countries, they have more or less the same size and their share of exports are similar. The U.S. is a country that has always been an example of growth and stability; its policies have been taken in a capitalist context and seem to have had good results.

With all the previous explanations we will proceed to analyse the changes in China since the reforms of 1978. The impact in the different areas of society, environment, economy, etc., will also be seen. To conclude, China will be compared to the U.S. and India to see if the changes have been substantial, and if we can say that China has become a renewed country, since the Maoist period, and the quality of life and economy are on track. The table below lists the categories with respect to which the comparison will be made.

Agriculture & Rural Development	Health
Aid Effectiveness	Infrastructure
Climate Change	Labor & Social Protection
Economic Policy & External Debt	Poverty
Education	Private Sector
Energy & Mining	Public Sector
Environment	Science & Technology
Financial Sector	Social Development
Gender	Urban Development

Taking into account that the World Data Bank has adopted these topics to classify the economic indicators, we will take the most important variables for a better understanding of the economy of China, India and the U.S. The tables below present the topics and the corresponding indicators that will be studied in this paper. Our aim is to determine the extent to which the trajectory followed by China in the last 35 years has been successful.

Socioeconomic and demographic variables				
Population pyramids	Gender inequality index (GII)	Life expectancy at birth, total (years)	Mortality rate, infant (per 1,000 live births)	Population, total
Unemployment, total (% of total labour force)	Net migration	Perception of corruption index	List by distribution of wealth, 2000	Prosperity index

Education				
School enrolment, secondary (% gross)	Expenditure in education (% of GDP)	Number of university students		

Macroeconomic view				
Trade (% of GDP)	Foreign direct investment, net outflows (% of GDP)	Foreign direct investment, net inflows (% of GDP)	Imports of goods and services (% of GDP)	Exports of goods and services (% of GDP)
GDP growth (annual %)				

Technological development				
Electric power consumption (kWh)	Electricity production (kWh)	Alternative and nuclear energy (% of total energy use)		

Environment				
CO2 emissions (metric tons per capita)	Improved water source (% of population with access)	Marine protected areas (% of territorial waters)	Forest area (% of land area)	Other greenhouse gas emissions (thousand metric tons of CO2)
Water pollution, wood industry (% of BOD emissions)	Water pollution, textile industry (% of BOD emissions)	Water pollution, food industry (% of BOD emissions)		

Financial variables				
M0 and M1	Broad money (% of GDP)	Broad money (% of GDP)	Inflation, GDP deflator (annual %)	Current account balance (% of GDP)
Real interest rate (%)	Lending interest rate (%)	Market capitalization of listed companies (% GDP)		

Industry vs. agriculture				
Employment in industry (% of total employment)	Industry, value added (% of GDP)	Employment in agriculture (% of total employment)	Agriculture, value added (% of GDP)	Urban population growth (annual %)
Urban population (% of total)	Rural population growth (annual %)	Rural population (% of total population)	Arable land (% of land area)	

Poverty				
GDP per capita (current US$)	GDP per capita growth (annual %)	International Wealth Index	Health expenditure, public (% of GDP)	Improved sanitation facilities (% of population with access)
Roads, paved (% of total roads)				

2. Benchmarks

Each of the previously chosen indicators will be used to define a benchmark, that is, a criterion or reference value to assess the performance with respect to that indicator. Graphs will show the performance of the three countries. With that information we will test if the benchmarks have been attained or not.

For the first indicator, **socioeconomic and demographic variables**, the benchmark is having a balanced shape population pyramid where, as the age increases, the percentage slowly decreases. This fact would indicate that the birth rate is high, we have young population, "sufficient" people in the labour force, and the mortality rate is low.

For the Gender Inequality Index we will require the lowest index possible, because as it approaches to 0, men and women fare more equally.

The life expectancy at birth is an indicator that speaks for itself. We want China to have higher life expectancy and also a lower mortality rate in the last decades.

Due to the one-child policy population is aging and there is a shortage of people in the labour force. For this reason the benchmark for the indicator Population is an increase, which will make the country solve the shortage problem.

The unemployment rate has to be as lower as possible. It will be a good sign to have low unemployment rates because, if the rates are high, the country is not using all the resources, specifically labour. The output would be higher if the entire workforce were usefully employed. High unemployment can also cause social problems such as crime; if people have less disposable income, crime seems very likely to increase within the economy.

Our benchmark regarding migration is having a high net migration, which means people enter into the country. This is an interesting fact, as it will give the country an amount of people that will be substitute for the less-skilled natives, which means that the high-skilled population will remain in their current job. On the other hand, if the net migration were negative, we would have a situation in which the population leaves the country. In that case, there would be an exit of high-skilled people or less-skilled people, which would not be really positive for the country.

For the perception of corruption, a higher score means the people are aware of the corruption of their country, which is positive. Otherwise, being in a low position in the ranking is the best circumstance possible, as it means the levels of corruption are low.

A high rate of wealth distribution in the country is a positive sign, so we will consider as benchmark having China as a high positioned country in this aspect.

The prosperity index represents a general view of different indicators: if green prevails in the table from section 3.10 means the country is one of the top countries of the world in terms of prosperity.

Education will have a similar pattern for all indicators, as enrolment in secondary schools and education spending should have a high percentage, and the number of university students should be the highest possible.

Regarding **macroeconomic view**, trade is an indicator that needs to increase, since it can give the country a progressive growth in the GDP, stimulus in the private investment and a reduction in inefficiencies.

A low foreign direct investment inflow is the benchmark. Having a high percentage of FDI means the country has a trade deficit. On the other hand, high foreign direct investment is a good sign, since this means that there are better investment conditions and the trade balance is positive.

Total imports of goods and services have to be lower than total exports, otherwise we would have a trade deficit, which is not very positive for the whole economy.

GDP growth is an indicator of the amount of goods and services produced within a country. Our benchmark is to have a high percentage of GDP.

Electric power consumption, electricity production and alternative and nuclear energy are part of the **technological development** category. The benchmark for all of them will be well considered if the graph lines soar.

For the **environment** indica category we will look for the least emissions of CO2 and greenhouse gases possible. Another bechmark is that China reduces its water pollution in wood, textile and food industry, despite the fact that the increase in pollution would indicate that the country grows in industry productivity and urban population, which is good. The higher percentage of improved water source, marine protected areas and forest area, the better.

M0, M1 and broad money are indicators of **financial variables**, as much money supply of narrow and broad money we have, the country owns more money (coins, notes, assets convertible into cash,

and short-term and long-term deposits in banks). The country is better off if it has an increase of money supply, because other things being equal this tends to reduce the interest rate. On the other hand, an increase of money supply tends to create inflation of prices. With a higher inflation people with one unit of currency can buy less products and services. A positive current account balance shows that the country has a surplus; it earns more money than it spends.

To be a competitive country, China's exchange rate (USD/CNY) has to be high, as foreign countries make China be an emergent country also thanks to its exports. If the currency exchange rate decreases, it means other countries will find more expensive to buy products from China, and make exports to slow down and that would cause a trade deficit in the economy.

That the real interest rate is high is a good sign because it contributes to have a low inflation. The lending interest rate is better for the population when it is low, as it can allow them to consume and invest more. The market capitalization of listed companies is a positive indicator if the number has increased in the last decades; it is sold and bought in public markets, and also used as a proxy for the public opinion of a company's net worth.

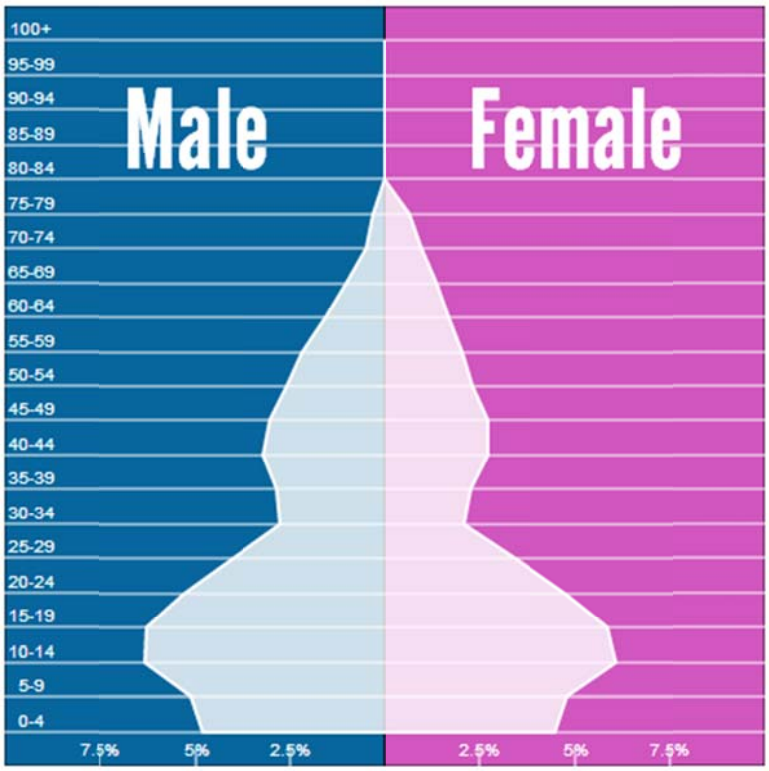
In the **Industry vs. agriculture** category we are going to consider as positive effect for the benchmark any increase in the industrial sector or urban population, and a negative effect the fact that the agricultural sector or rural population increases in percentage any of its categories.

The **poverty** category includes several indicators. The first one is GDP per capita. Its evolution during the last years has to be a substantial increase to consider it a positive progress and an improvement in quality of life. The same applies to GDP per capita growth.

For the International Wealth Index we will expect China to have a rising average growth rate. This indicator gives us information about the percentage of population that is wealthy. Health expenditure and improved sanitation facilities are hoped for being higher in the last years than before. The percentage of paved roads must have increased to be a positive effect of the reforms, as it will indicate that there are more facilities for transportation and movement of people from city to city.

3. Socioeconomic and demographic variables

3.1 Population pyramids



CHINA 1975

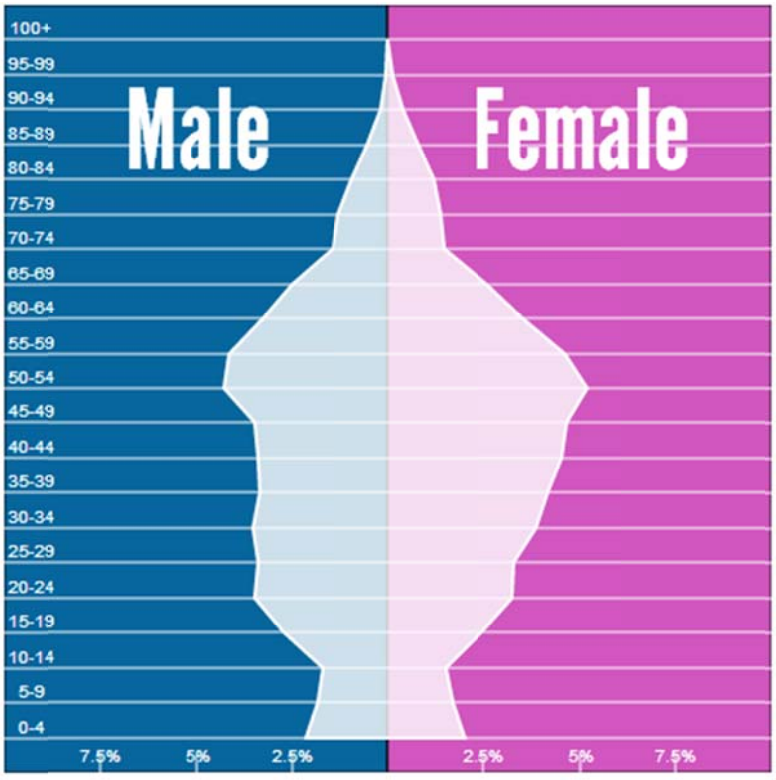
The population was of 4,330,000,000 people. The pyramid indicates the importance of young population. From that, we can infer the birth rates were higher some years before, and we can see a rapid population decline as we approach to the top.

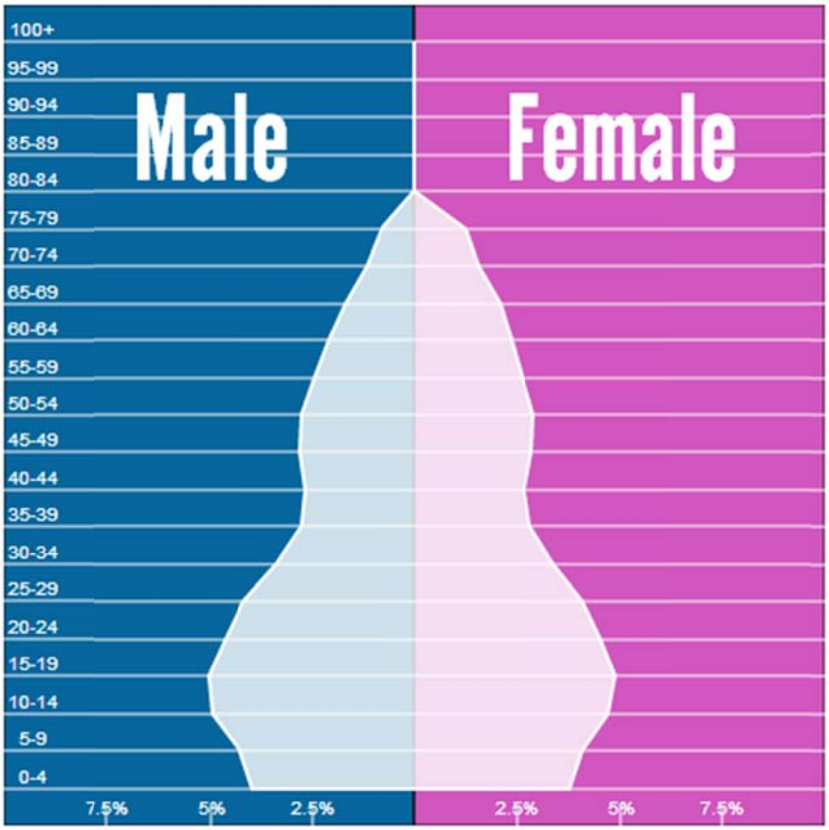
Source:http://populationpyramid.net/China+Hong+Kong+SAR/1975/

CHINA 2015

The population will be of about 7,431,000,000 people. The base of the pyramid is less wide because the birth rates will be reduced. There is an accumulation of adults and the old population will be higher than in 1975. Regarding gender, we can see a difference in the adult population, as the percentage of people between 50-54 years is higher in women than in men.

Source: http://populationpyramid.net/China+Hong+Kong+SAR/2015/





US 1975

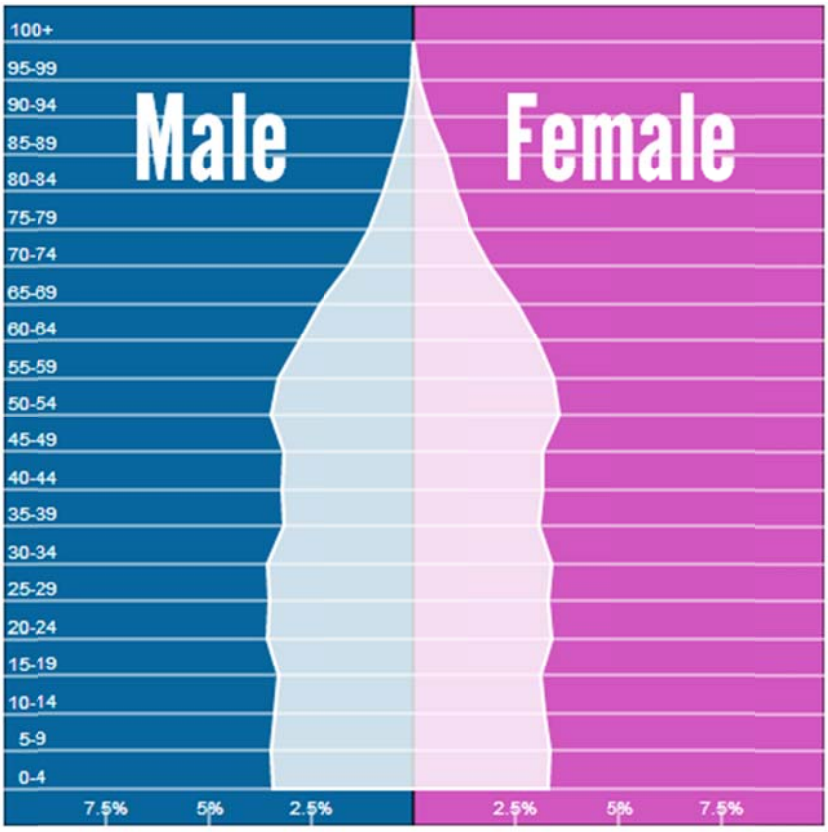
The population was of 230,000,000 people. The shape of the pyramid shows a wider percentage of young population and birth rates. It gets narrower as we get closer to the top, which means that there were higher death rates.

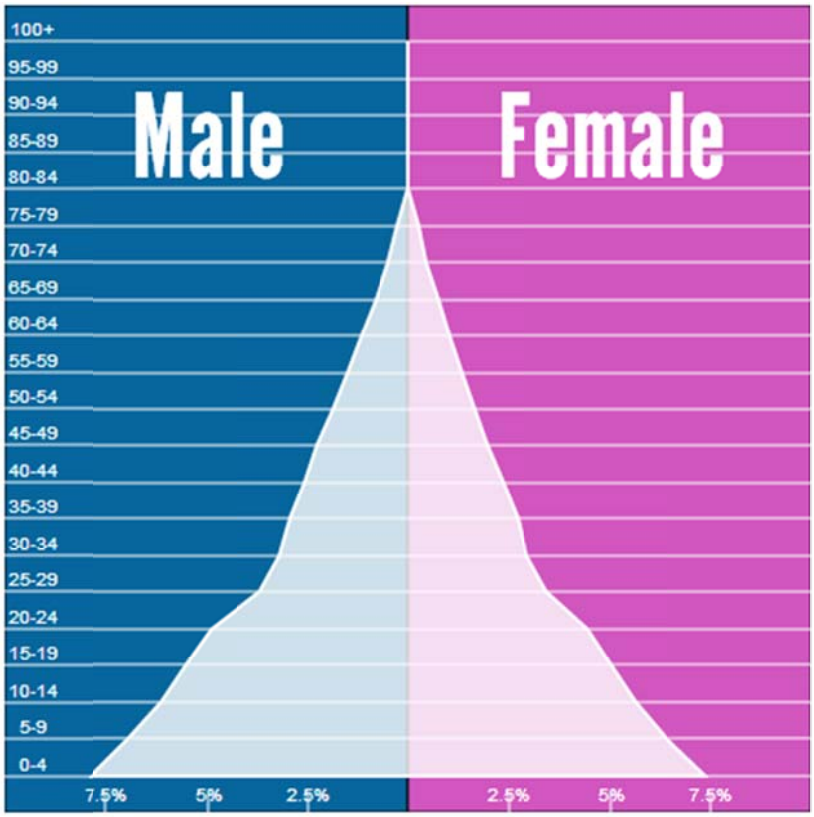
Source:
http://populationpyramid.net/United+States+of+America/1975/

US 2015

The population will be of about 323,887,000. We can see a difference from the other pyramid, as population will be very equal; there will be almost no difference of percentages between young and old population. And the percentage of old people will be higher than in 1975.

Source:
http://populationpyramid.net/United+States+of+America/2015/





INDIA 1975

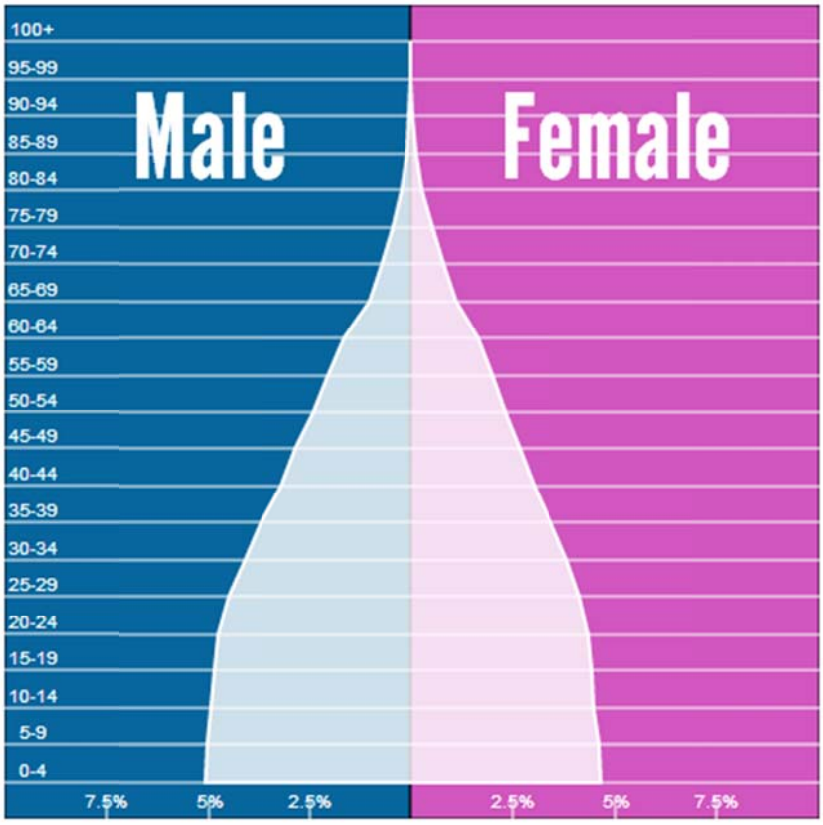
The pyramid is from 1975, the population was of 620,025,000 people. This is an example of an expansive pyramid. The birth rate was very high as also was the death rate.

Source:
http://populationpyramid.net/India/1975/

INDIA 2015

The population will be of about 1,308,225,000 people. In comparison with the pyramid of 1975 we can see that the base reduces percentage, and the higher stages of population have a higher share of the total percentage. It means that both the birth rate and the death rate are lower.

Source:
http://populationpyramid.net/India/2015/



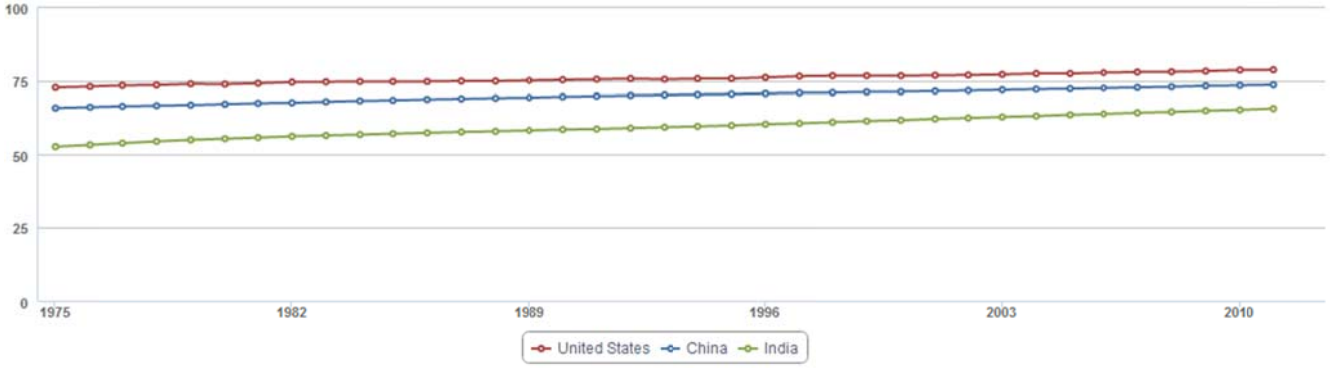
3.2 Gender inequality index (GII)[1]

A composite measure reflecting inequality in achievements between women and men in three dimensions: reproductive health, empowerment and the labour market. To learn how to calculate the Gender inequality index see *http://hdr.undp.org/en/media/HDR_2012_EN_TechNotes.pdf*

	2000	2005	2008	2010	2012
China	0.579	0.225	...	0.207	0.213
India	...	0.637	...	0.619	0.61
US	...	0.288	...	0.288	0.256

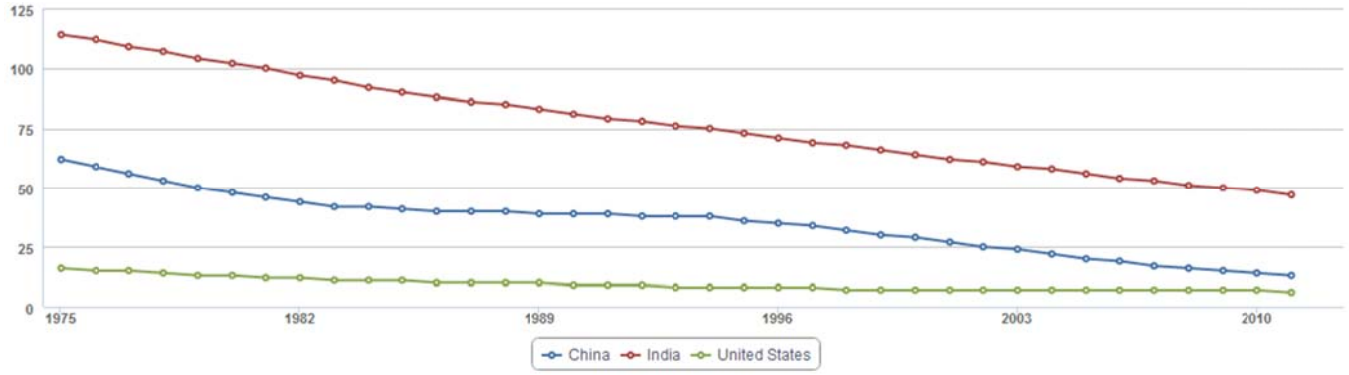
Source: http://hdrstats.undp.org/en/indicators/68606.html

3.3 Life expectancy at birth, total (years), period: 1975-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

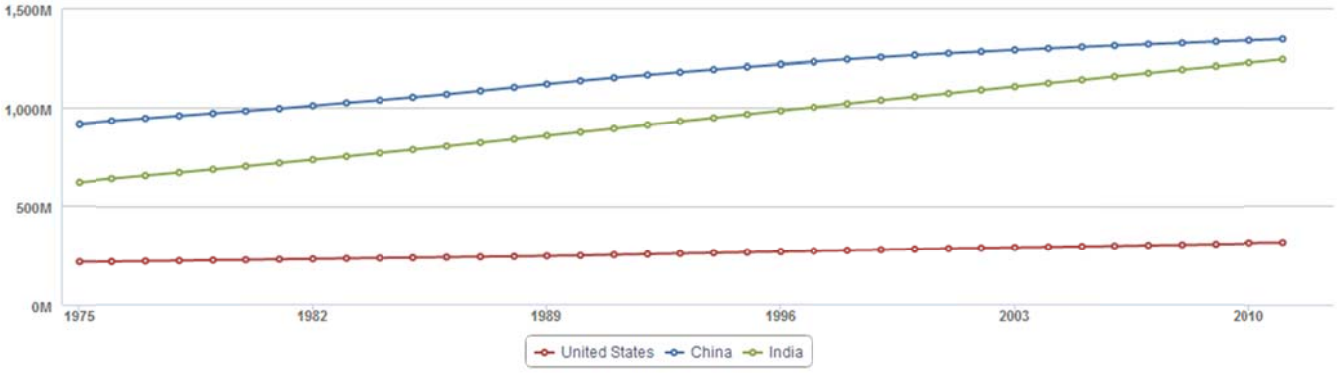
3.4 Mortality rate, infant (per 1,000 live births), period: 1975-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

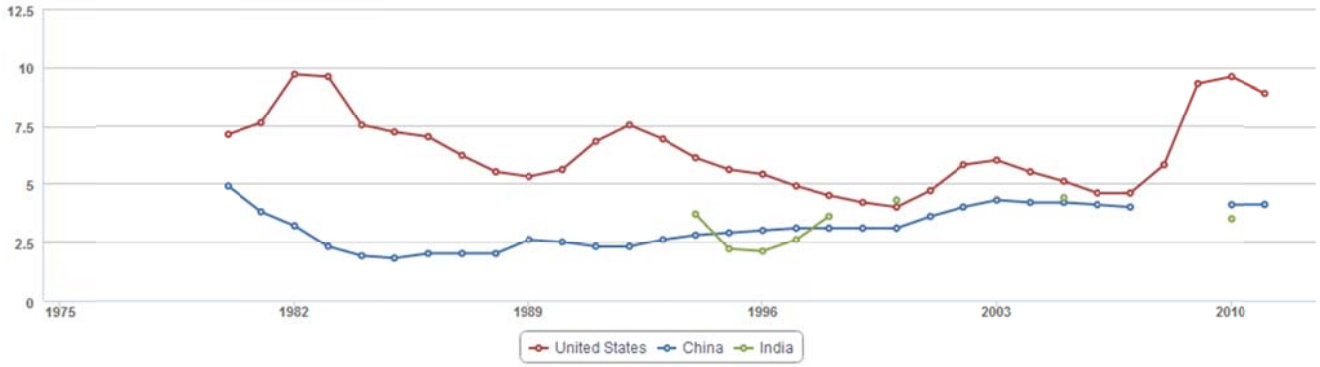
[1] The Gender Inequality Index (GII) reflects gender-based disadvantages in three dimensions—reproductive health, empowerment and the labour market—for as many countries as data of reasonable quality allow. The index shows the loss in potential human development due to inequality between female and male achievements in these dimensions. It varies between 0, where women and men fare equally, and 1, where either gender fares as poorly as possible in all measured dimensions.

3.5 Population, total, period: 1975-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

3.6 Unemployment, total (% of total labour force), period: 1980-2011

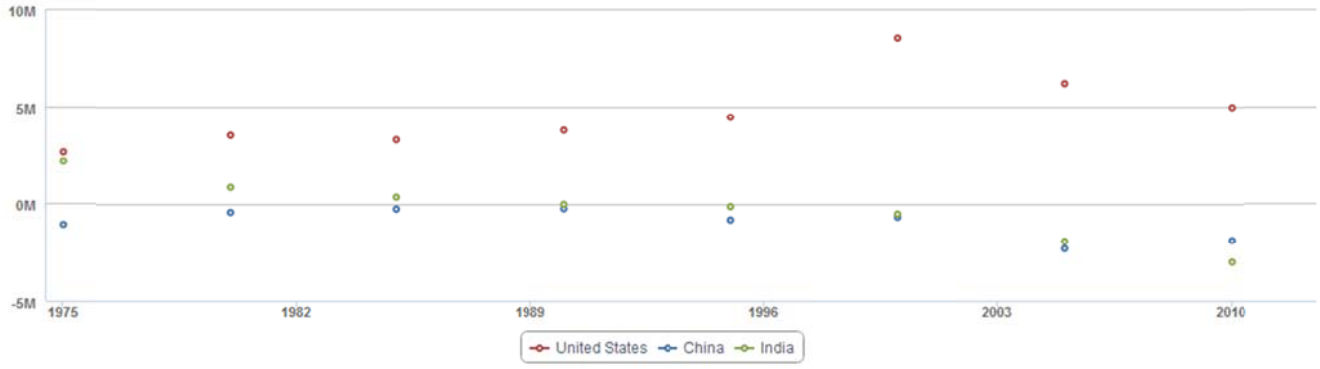


Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

As in the previous graph we cannot see what is India's performance in history, below there is a graph showing the behaviour of **India's unemployment rate**, from 1975 to 2012.

Source: http://data.bls.gov/pdq/SurveyOutputServlet

3.7 Net migration, period: 1975-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

3.8 Perception of corruption index[2], year 2012

Global position	Country	Score
80	China	39
90	India	36
19	The US	73

Source:http://www.transparency.org/news/pressrelease/20121205_comunicado_de_prensa_indice_de_percepcion_de_la_corrupcion_2012

3.9 List by distribution of wealth year 2000

Country	population (1000s)	adults (1000s)	Share of world population (%)	Share of adult population (%)	Wealth per capita	Wealth per adult	Share of world wealth (%)	GDP per capita	Share of world GDP (%)	Wealth Gini
China	1251788	842063	20.57	22.77	11267	16749	8.77	3844	10.3	0.55
India	1021084	570596	16.78	15.43	6513	11655	4.14	2684	5.87	0.669
United States	284154	202865	4.67	5.49	143727	201319	25.4	35619	21.67	0.801

Source: http://en.wikipedia.org/wiki/List_of_countries_by_distribution_of_wealth

[2] The Corruption Perceptions Index measures the perceived levels of public sector corruption. The maximum score is 90 points.

3.10 Prosperity index, year 2012

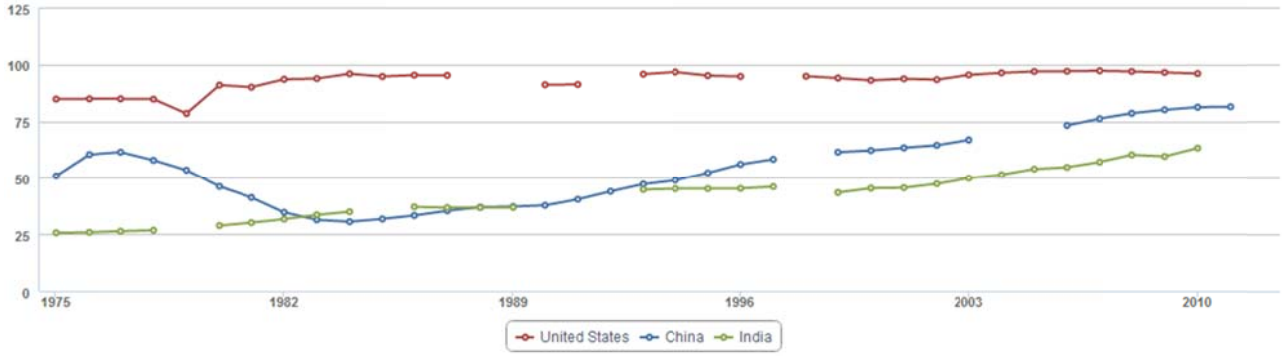
High Ranking Countries (30) | Upper Middle Ranking Countries (41) | Lower Middle Ranking Countries (41) | Low Ranking Countries (30)

Country	PI 2012	Economy	E&O	Governance	Education	Health	Safety & Security	Personal freedom	Social capital
India	101	57	99	49	100	104	114	67	138
China	55	11	66	65	50	67	101	128	29
United States	12	20	12	10	5	2	27	14	10

Source: http://webapi.prosperity.com/download/pdf/The_2012_Legatum_Prosperity_index_Rankings.pdf

4. Education

4.1 School enrolment, secondary (% gross), period: 1975-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

4.2 Expenditure in education (% of GDP), period: 1980-2010

Rank	Country	1980	1990	2000	2005	2010
60	The US	--	5.0	--	5.3	5.4
161	China	1.9	--	--	--	4.0
131	India	--	--	3.4	3.1	3.0

Source: http://hdrstats.undp.org/en/indicators/38006.html
http://databank.worldbank.org/data/views/reports/chart.aspx

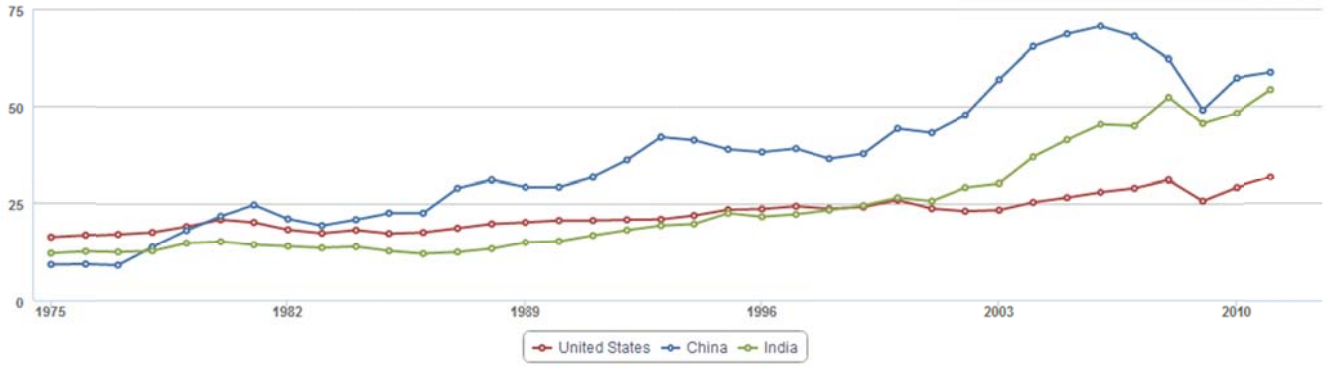
4.3 Number of university students (top 10 rank)

▲	Country	Number of University Students
1.	United States	14,261,800
2.	India	6,060,420
3.	Japan	3,917,710
4.	China	3,350,720
5.	Russia	2,587,510
6.	France	2,062,500
7.	Philippines	2,017,970
8.	Italy	1,892,540
9.	Indonesia	1,889,410
10.	Brazil	1,868,530

Source: http://www.aneki.com/students.html

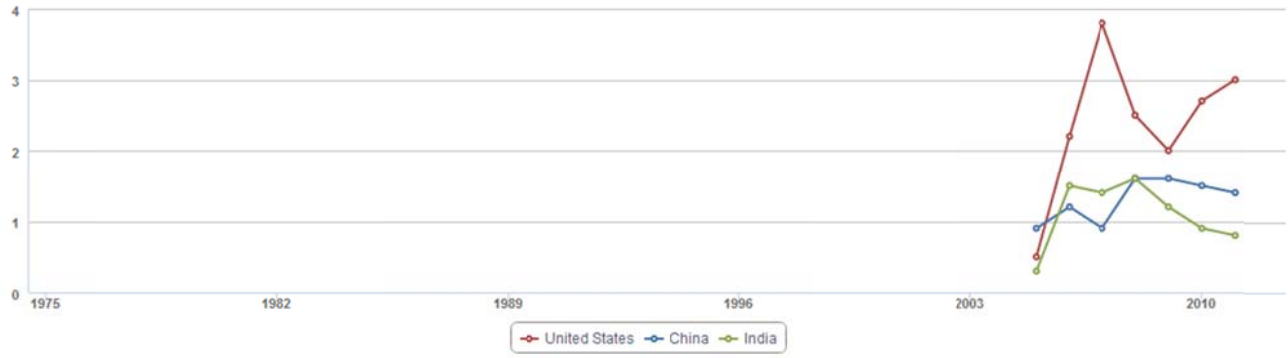
5. Macroeconomic view

5.1 Trade (% of GDP), period: 1975-2011



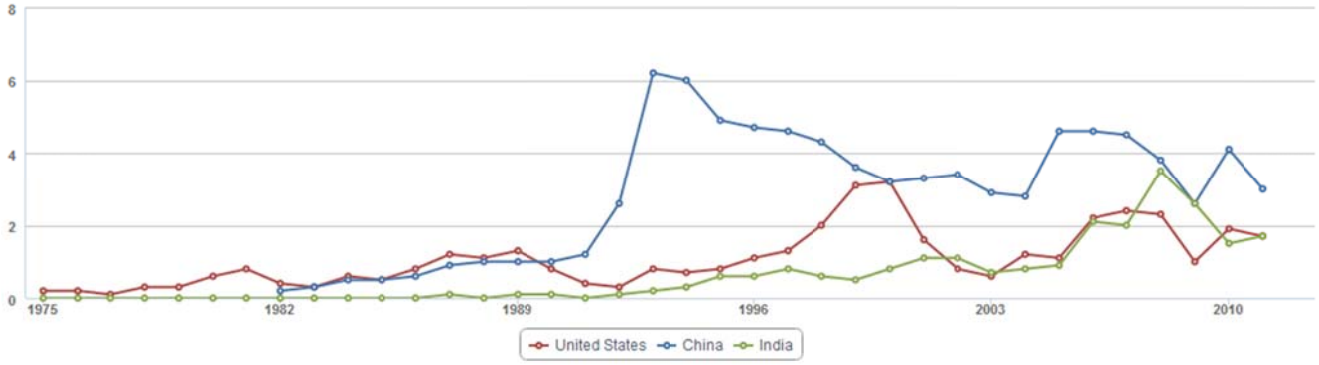
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

5.2 Foreign direct investment, net outflows (% of GDP), period: 2005-2011



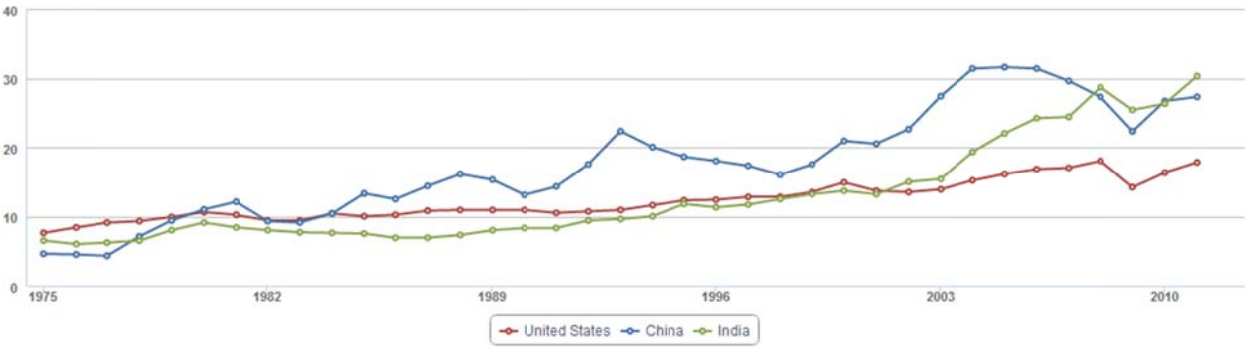
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

5.3 Foreign direct investment, net inflows (% of GDP) period: 1975-2011



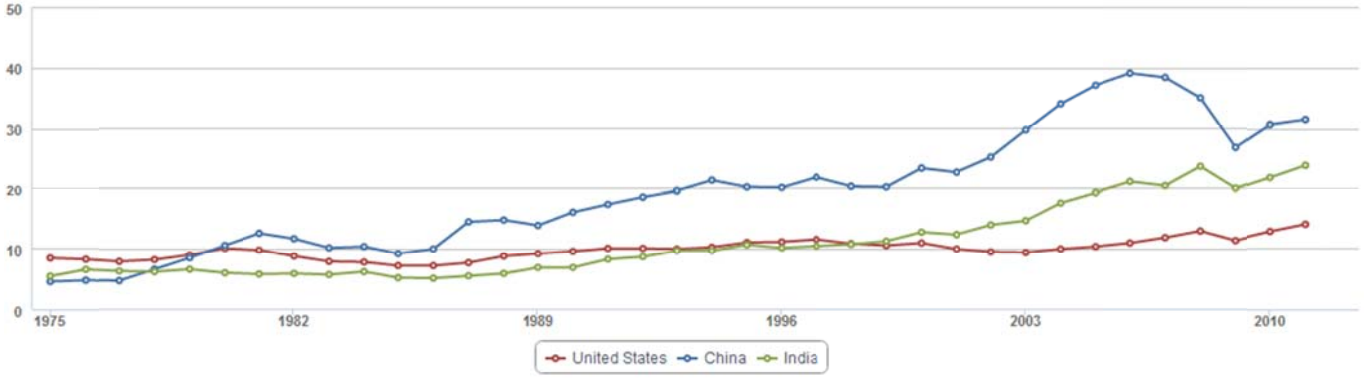
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

5.4 Imports of goods and services (% of GDP) period: 1975-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

5.5 Exports of goods and services (% of GDP) period: 1975-2011



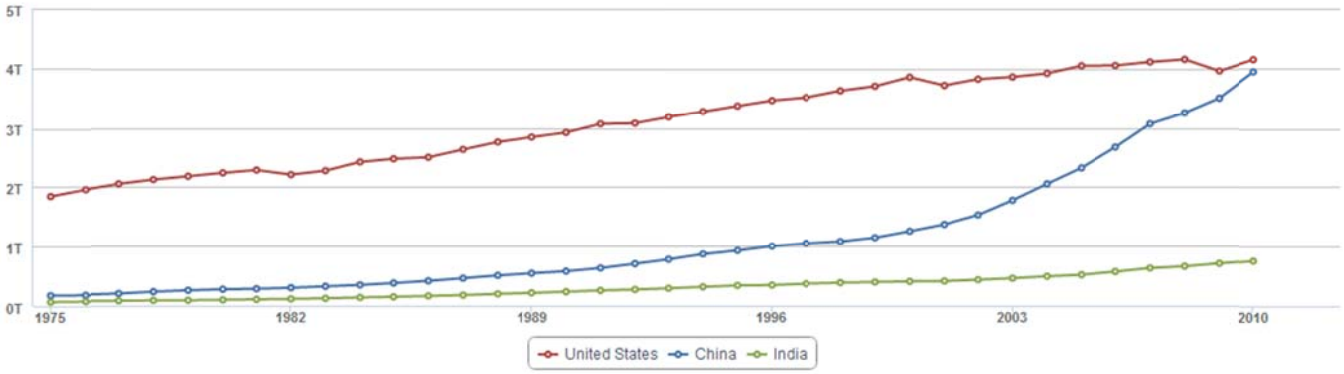
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

5.6 GDP growth (annual %) period: 1975-2011

Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

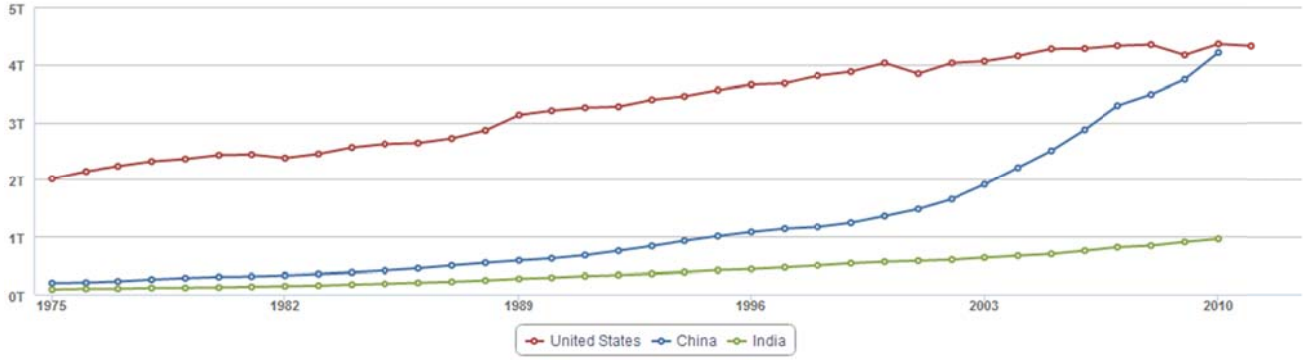
6. Technological development

6.1 Electric power consumption (kWh), period: 1975-2011



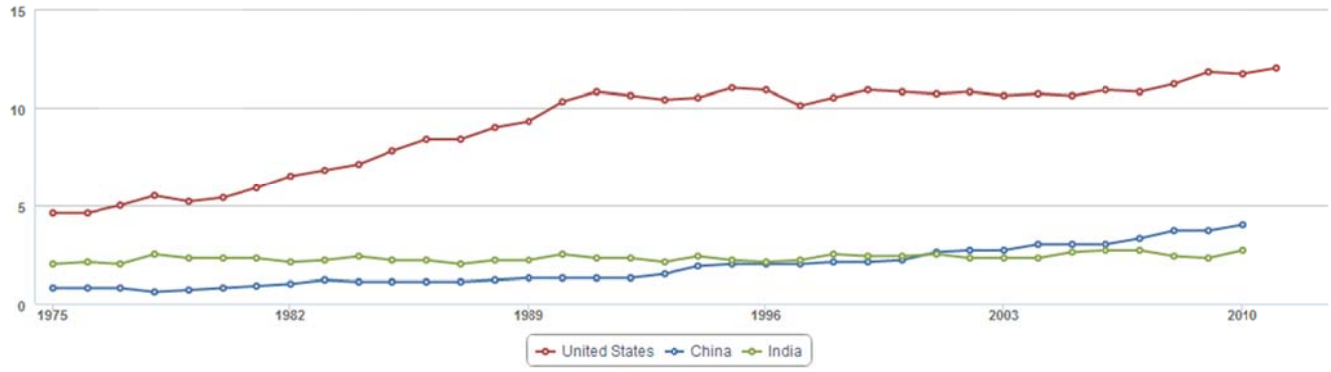
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

6.2 Electricity production (kWh), period: 1975-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

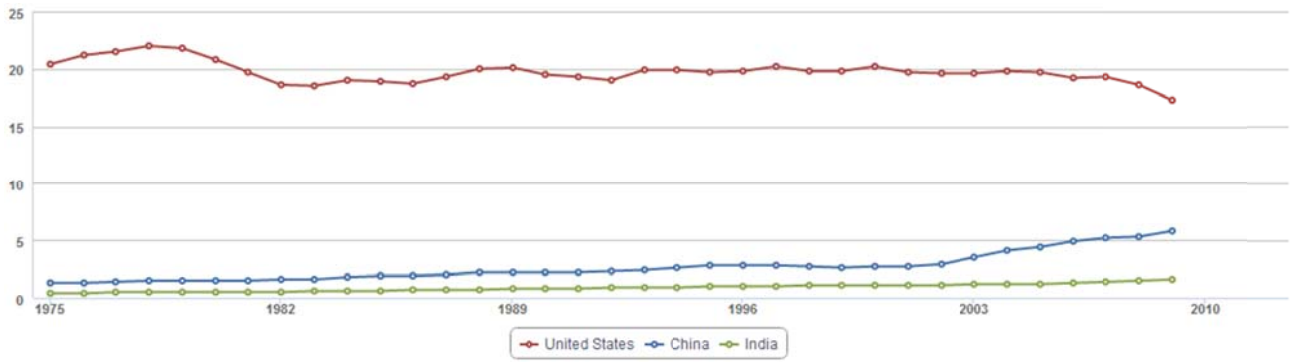
6.3 Alternative and nuclear energy (% of total energy use), period: 1975-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

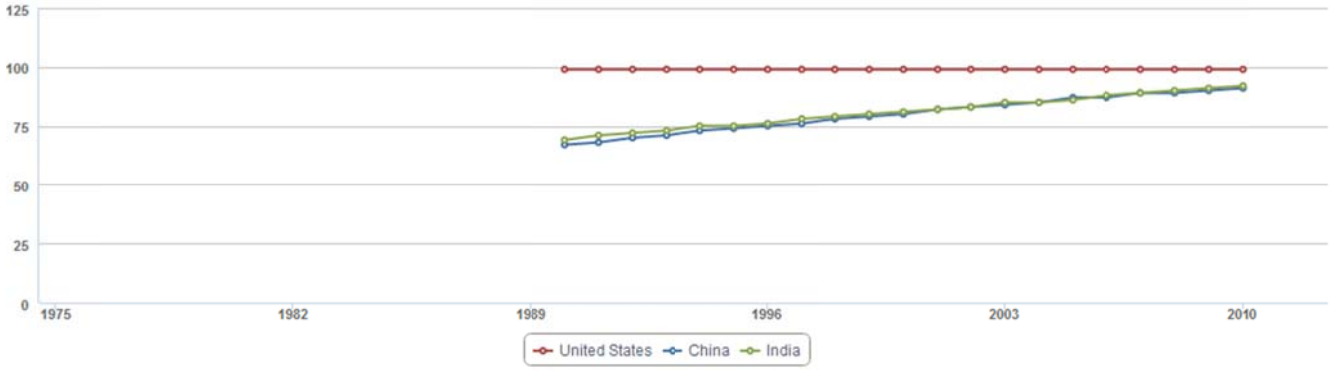
7. Environment

7.1 CO2 emissions (metric tons per capita), period: 1975-2009



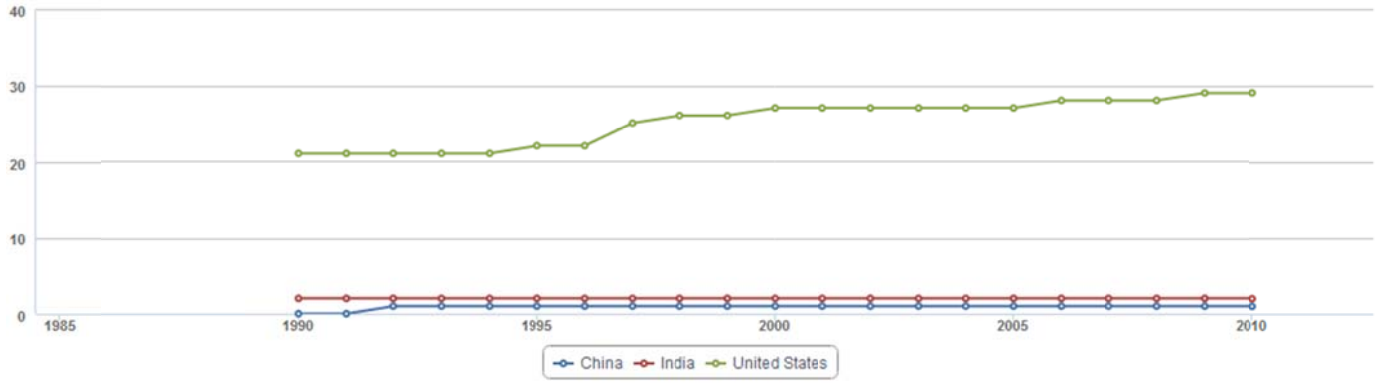
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

7.2 Improved water source (% of population with access), period: 1975-2011



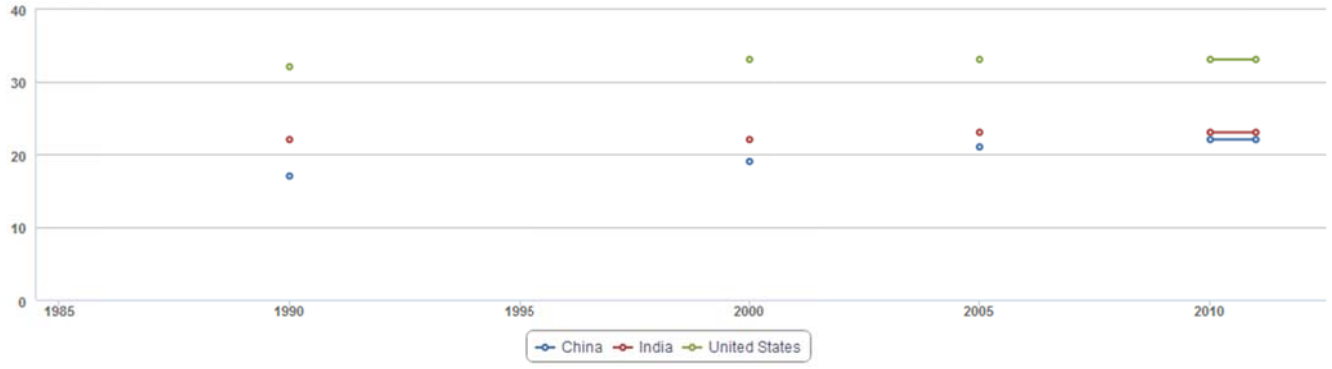
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

7.3 Marine protected areas (% of territorial waters), period: 1990-2010



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

7.4 Forest area (% of land area), period: 1990-2011

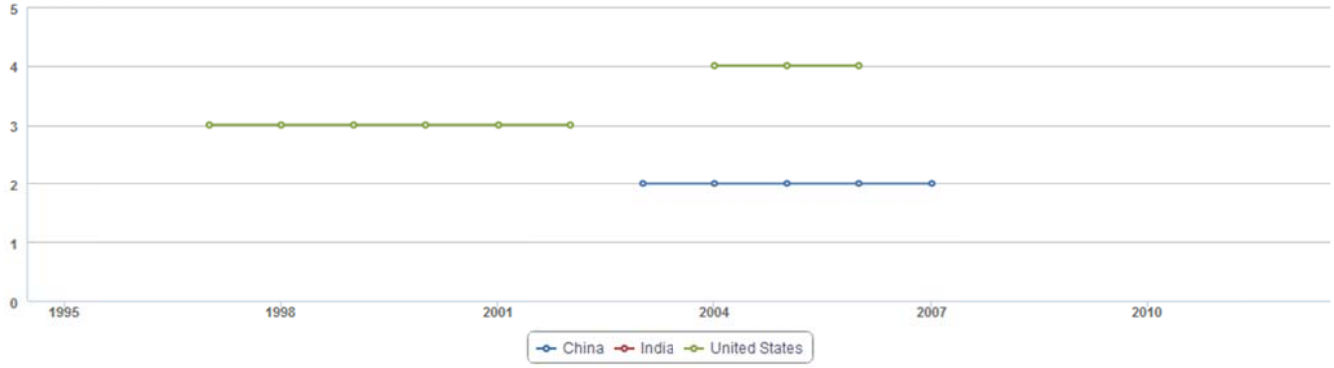


Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

7.5 Other greenhouse gas emissions, HFC, PFC and SF6 (thousand metric tons of CO2 equivalent), period: 1990-2010

Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

7.6 Water pollution, wood industry (% of BOD emissions)

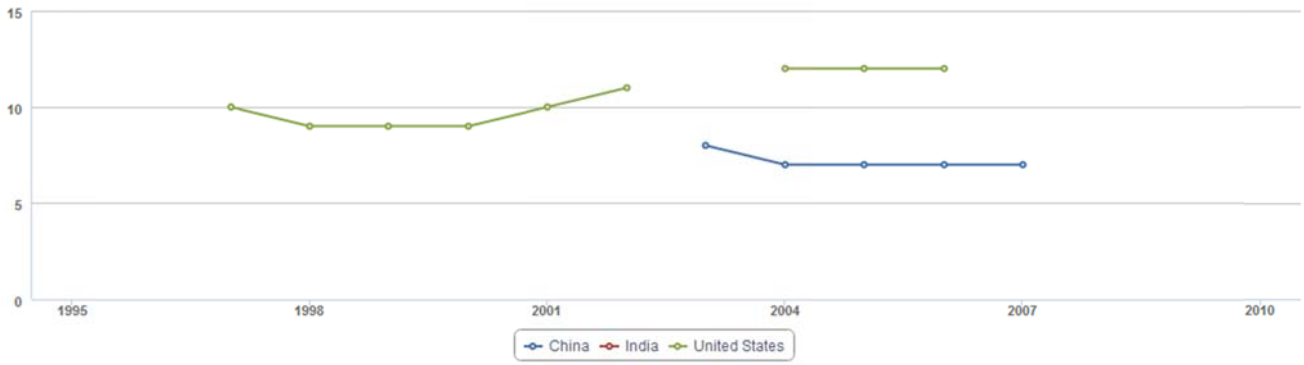


Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

7.7 Water pollution, textile industry (% of BOD emissions)

Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

7.8 Water pollution, food industry (% of BOD emissions)



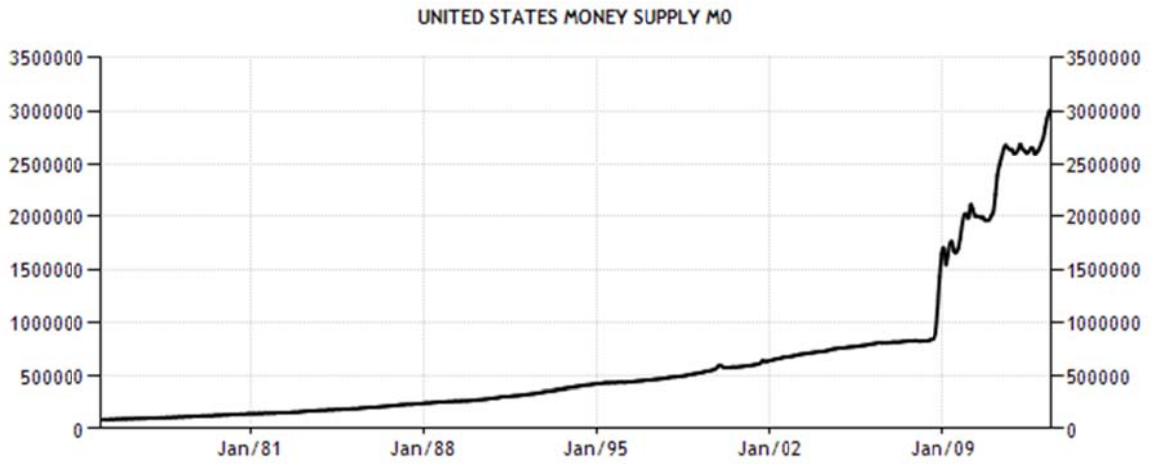
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

8. Financial variables

8.1 M0 and M1

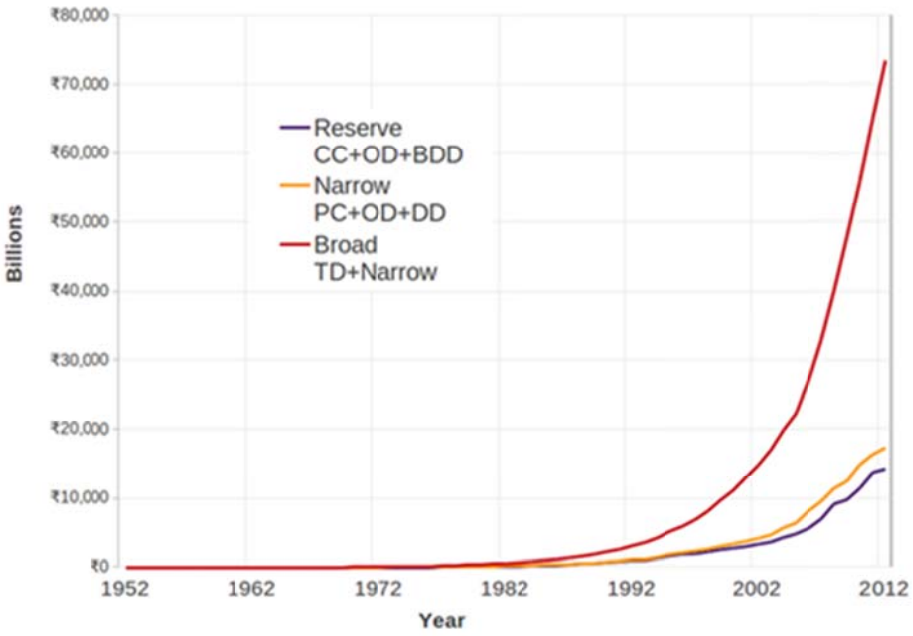
Source: http://www.tradingeconomics.com/china/money-supply-m0

Money Supply is the aggregate amount of monetary assets available in a country at a specific time. According to the Financial Times, Money Supply M0 and M1, also known as narrow money, includes coins and notes in circulation and other assets that are easily convertible into cash.



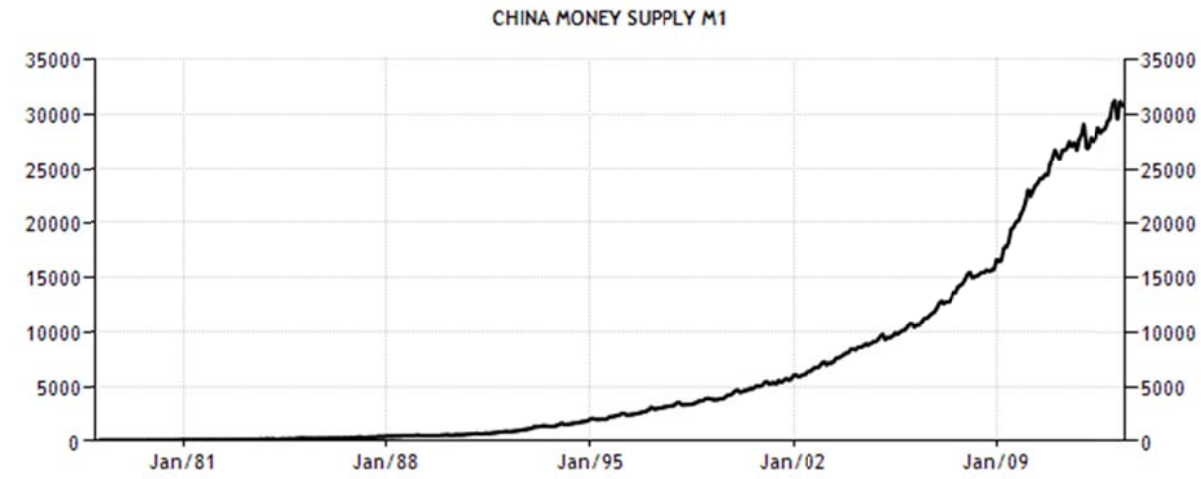
Source: http://www.tradingeconomics.com/united-states/money-supply-m0

India money supply

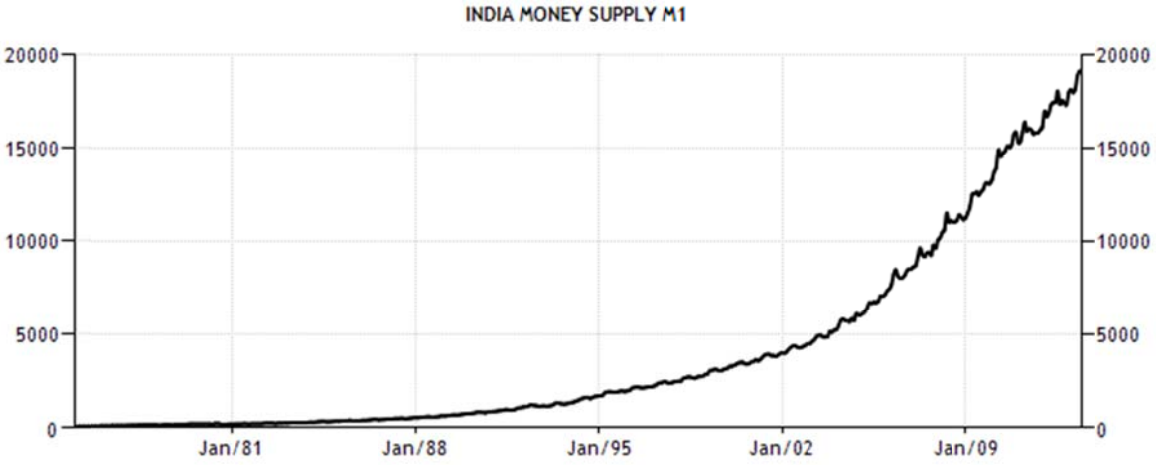


**15,000.00 INR= 216.717 USD*

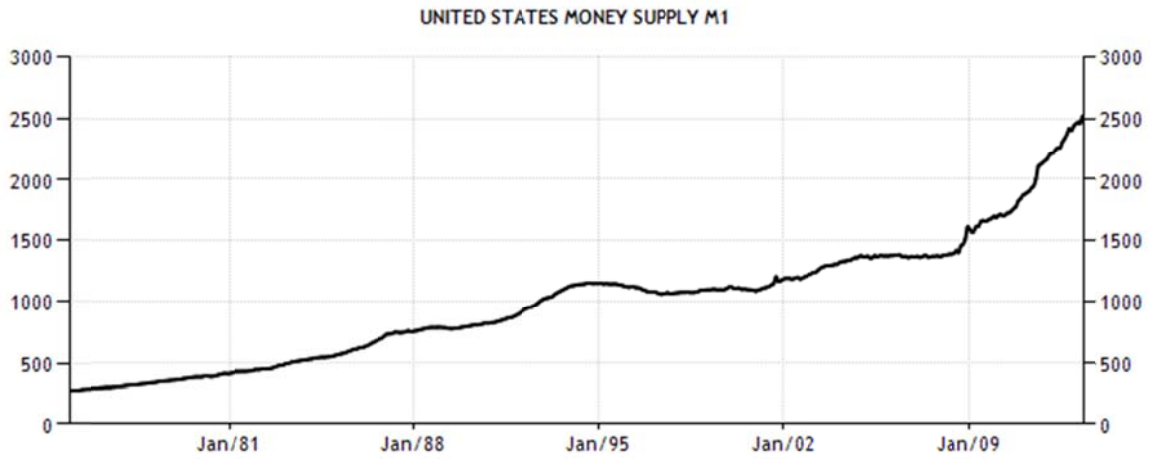
Source: http://en.wikipedia.org/wiki/File:India_Money_Supply_Components--Larger_Label_Fonts.png



Source: http://www.tradingeconomics.com/china/money-supply-m1

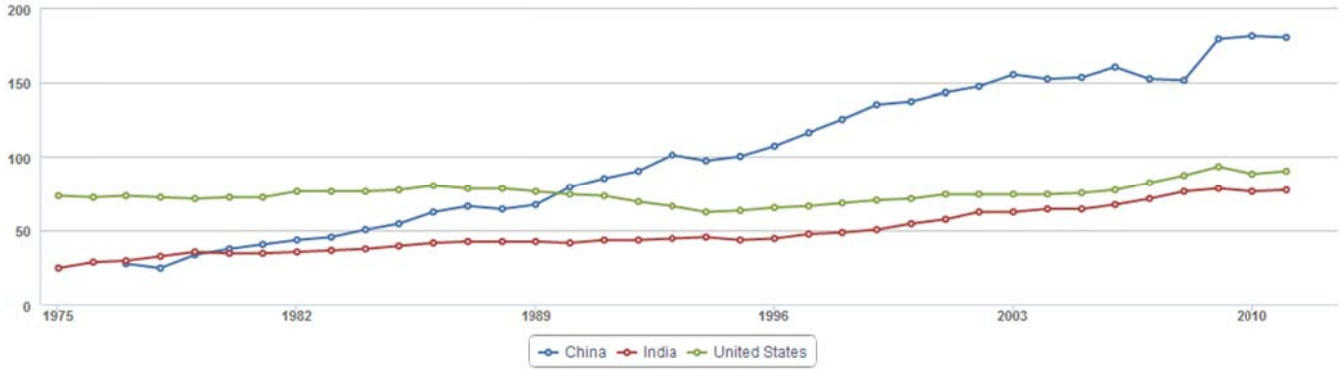


Source: http://www.tradingeconomics.com/india/money-supply-m1



Source: http://www.tradingeconomics.com/united-states/money-supply-m1

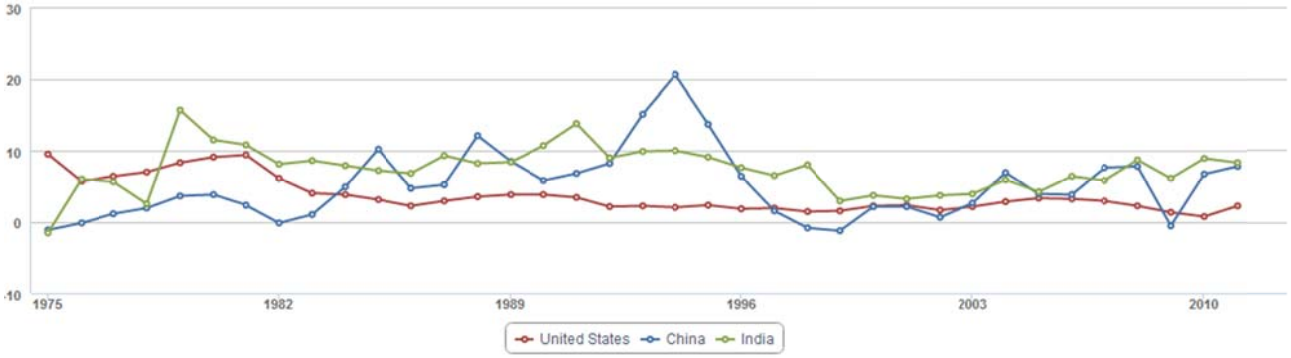
8.2 Broad money (% of GDP) period: 1975-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

Money Supply M2 includes M1 plus short-term time deposits in banks. Money Supply M3 includes M2 plus longer-term time deposits. Money Supply includes M3 plus other deposits. And the term broad money is used to describe Money Supply M2, M3 or M4.

8.3 Inflation, GDP deflator (annual %), period: 1975-2011



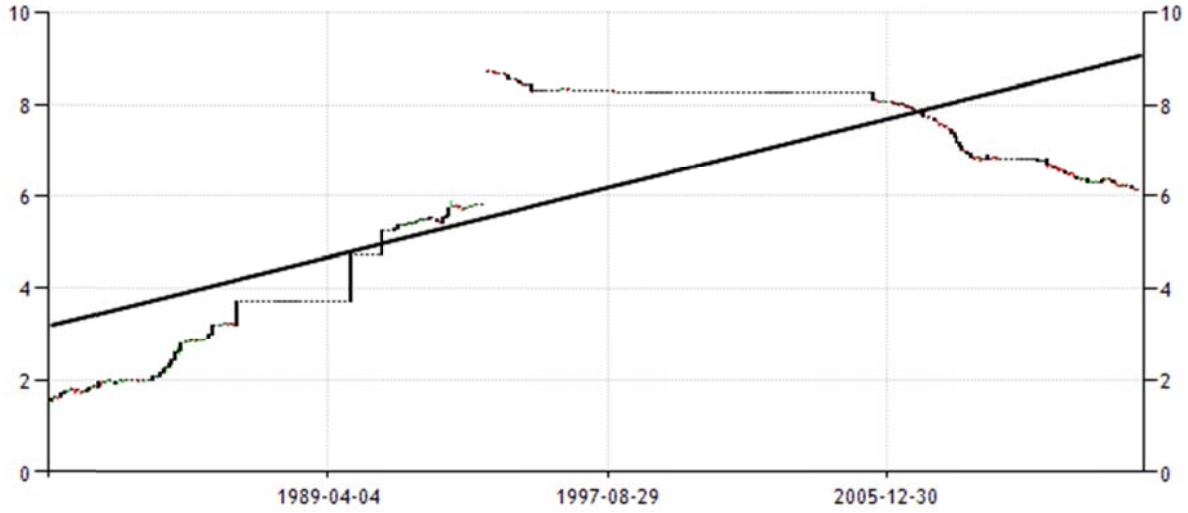
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

8.4 Current account balance (% of GDP), period: 2005-2011

Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

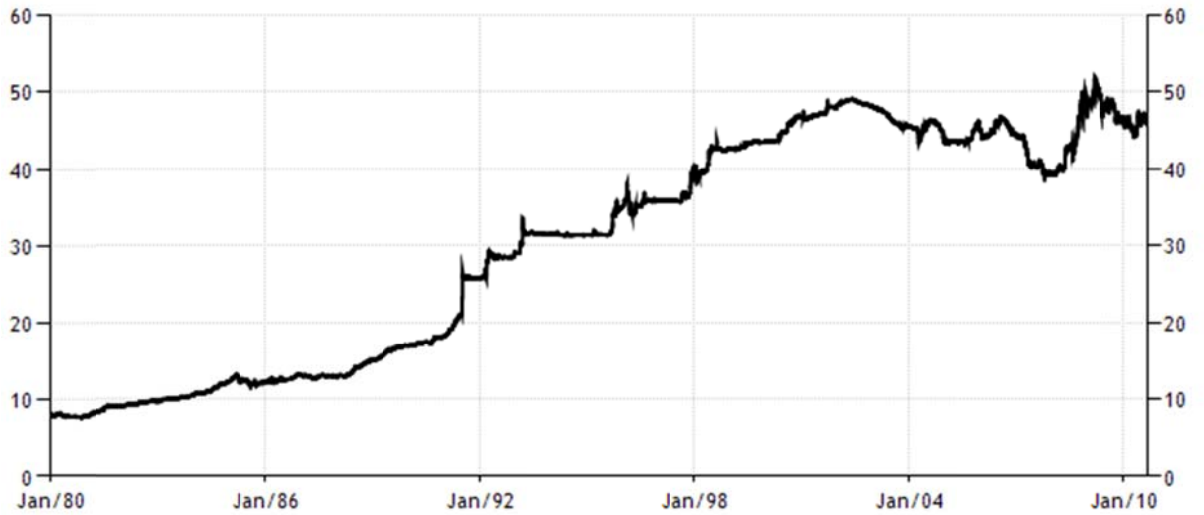
8.5 Currency

The USDCNY spot exchange rate depreciated 0.0110 or 0.18 percent during the last 30 days. Historically, from 1981 until 2013, the USDCNY averaged 7.0400 reaching an all time high of 8.7300 in January of 1994 and a record low of 1.5300 in January of 1981. The USDCNY spot exchange rate specifies how much one currency, the USD, is currently worth in terms of the other, the CNY. While the USDCNY spot exchange rate is quoted and exchanged in the same day, the USDCNY forward rate is quoted today but for delivery and payment on a specific future date.



Source: http://www.tradingeconomics.com/china/currency

India / U.S. Foreign Exchange Rate in the United States was recorded at 45.70 Indian Rupees to 1 U.S. $ in August of 2010, according to the United States Federal Reserve. Historically, India / U.S. Foreign Exchange Rate averaged 26.0109 Indian Rupees to 1 U.S. $ since inception reaching a record high of 51.9600 Indian Rupees to 1 U.S. $ and a record low of 7.1900 Indian Rupees to 1 U.S. $.

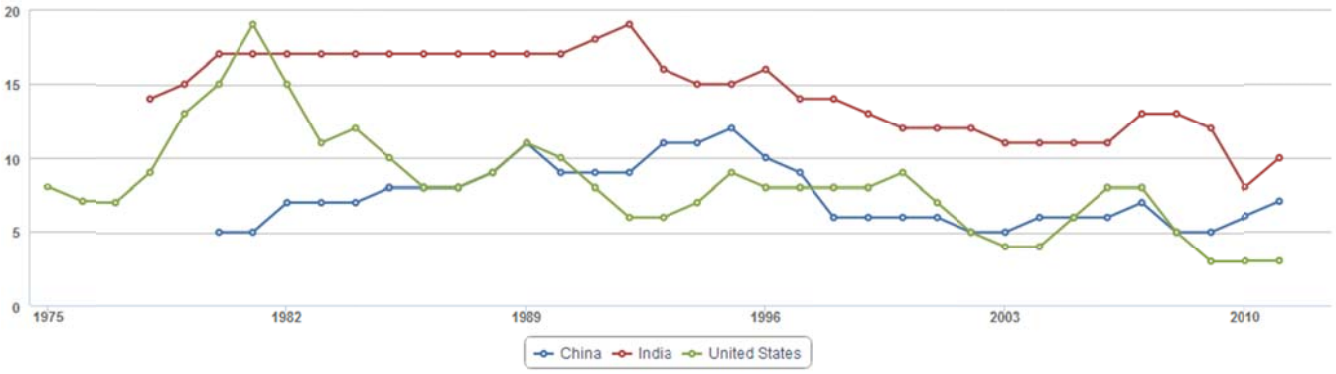


Source: http://www.tradingeconomics.com/india/currency

8.6 Real interest rate (%), period: 1975-2011

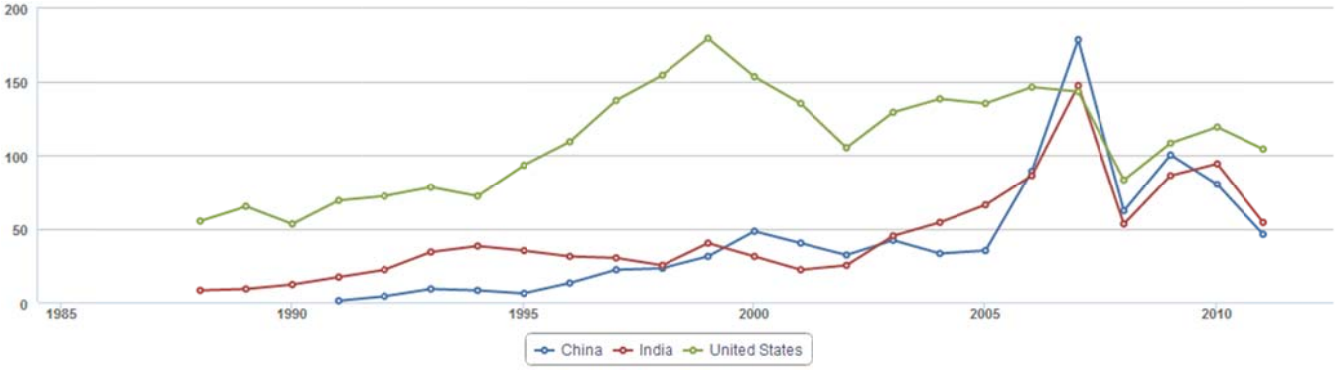
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

8.7 Lending interest rate (%), period: 1975-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

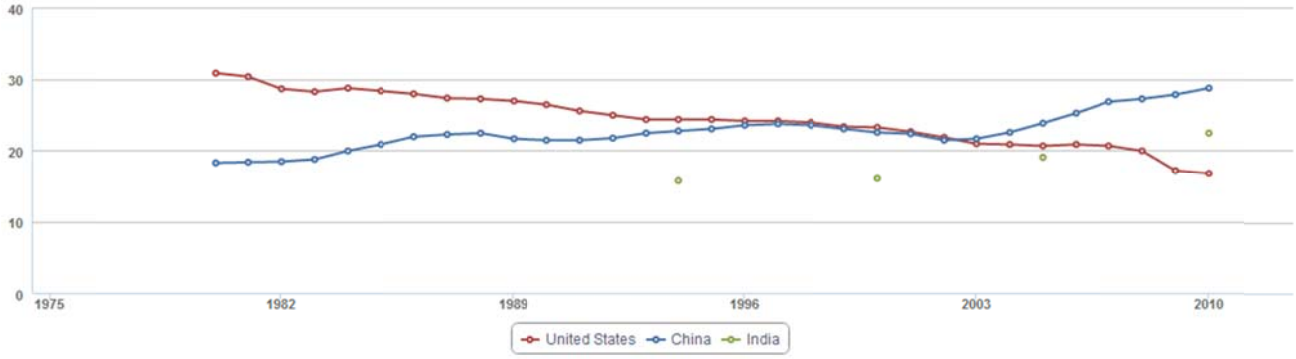
8.8 Market capitalisation of listed companies (% of GDP), period: 1988-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

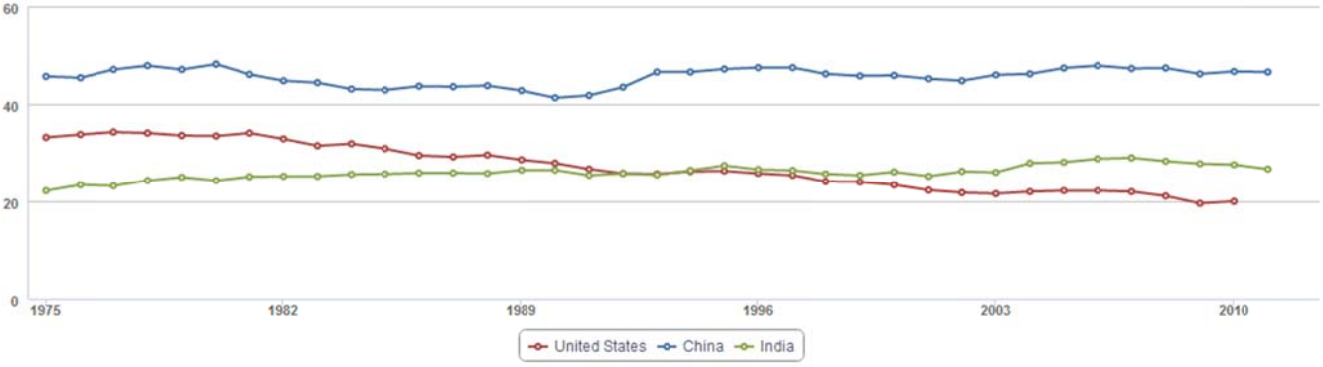
9. Industry vs. agriculture

9.1 Employment in industry (% of total employment), period: 1980-2011



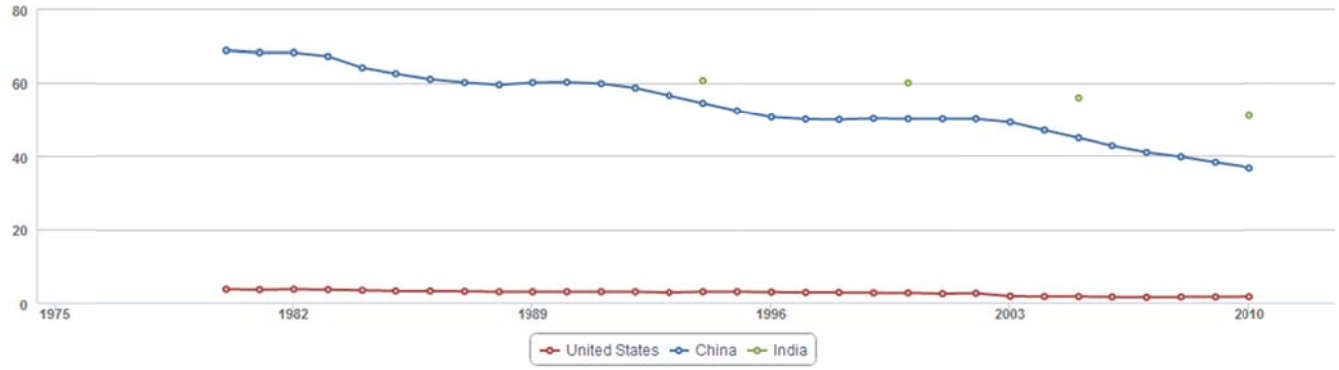
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

9.2 Industry, value added (% of GDP), period: 1975-2011



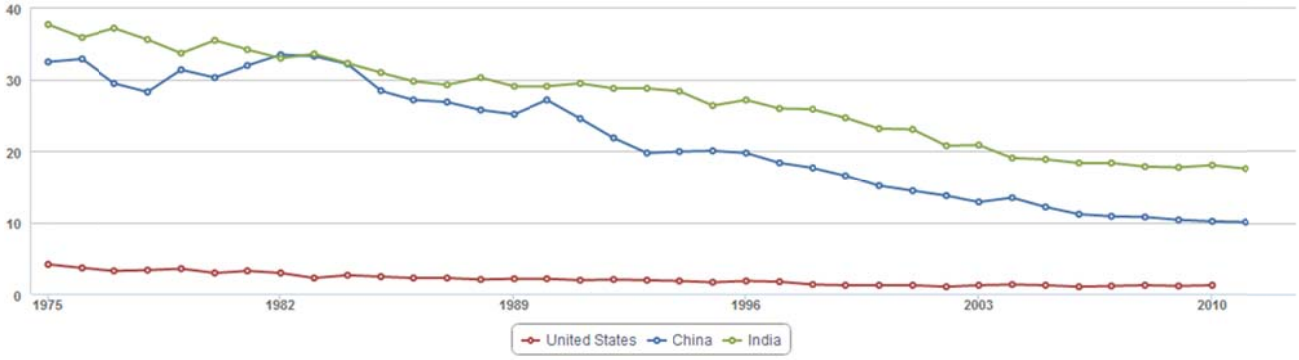
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

9.3 Employment in agriculture (% of total employment), period: 1980-2011



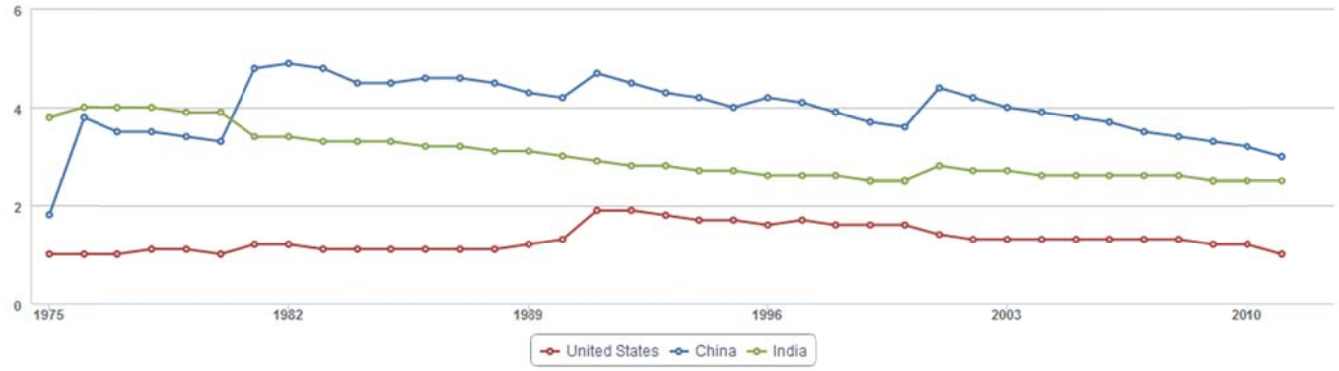
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

9.4 Agriculture, value added (% of GDP), period: 1975-2011



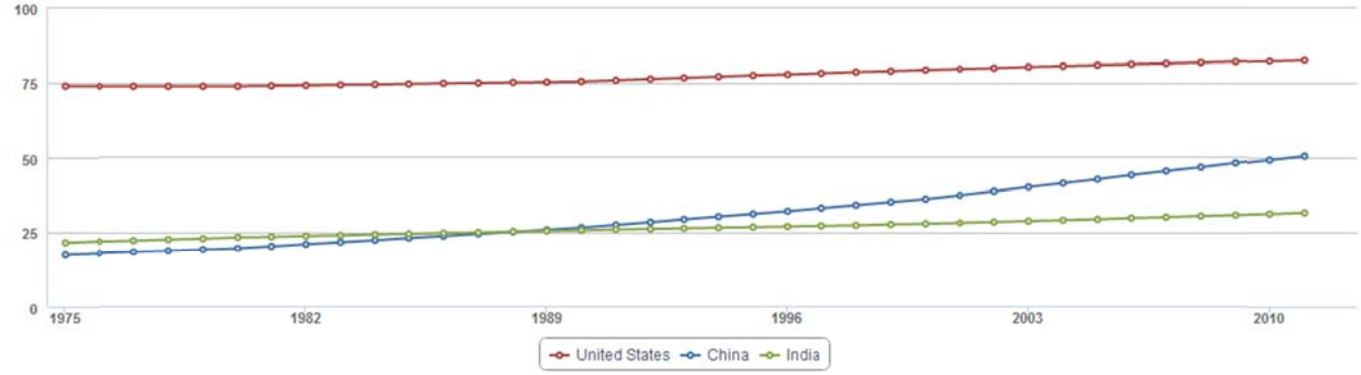
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

9.5 Urban population growth (annual %), period: 1975-2011



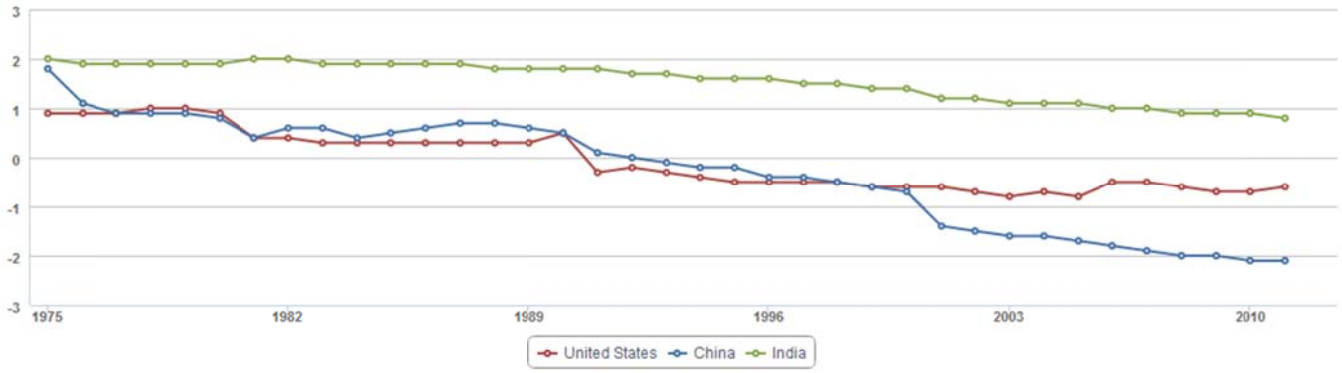
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

9.6 Urban population (% of total), period: 1975-2011



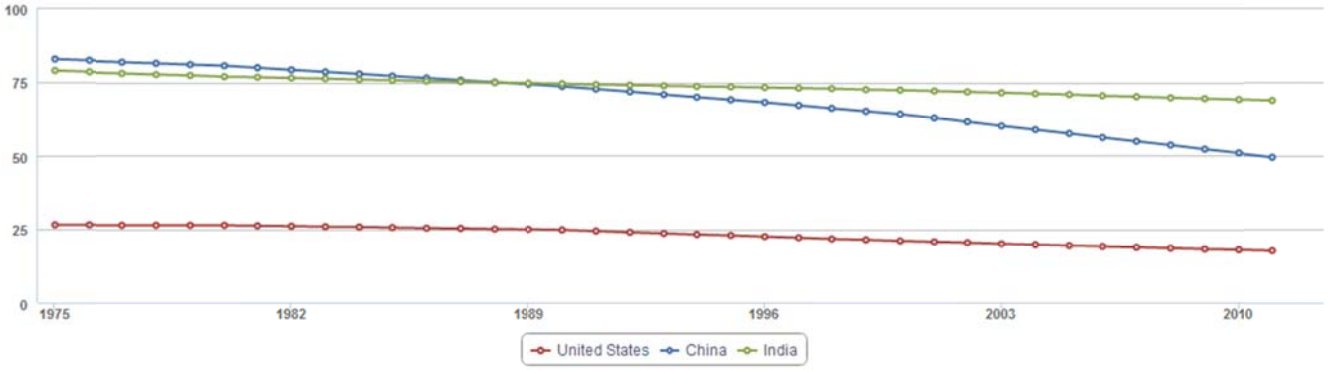
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

9.7 Rural population growth (annual %), period: 1975-2011



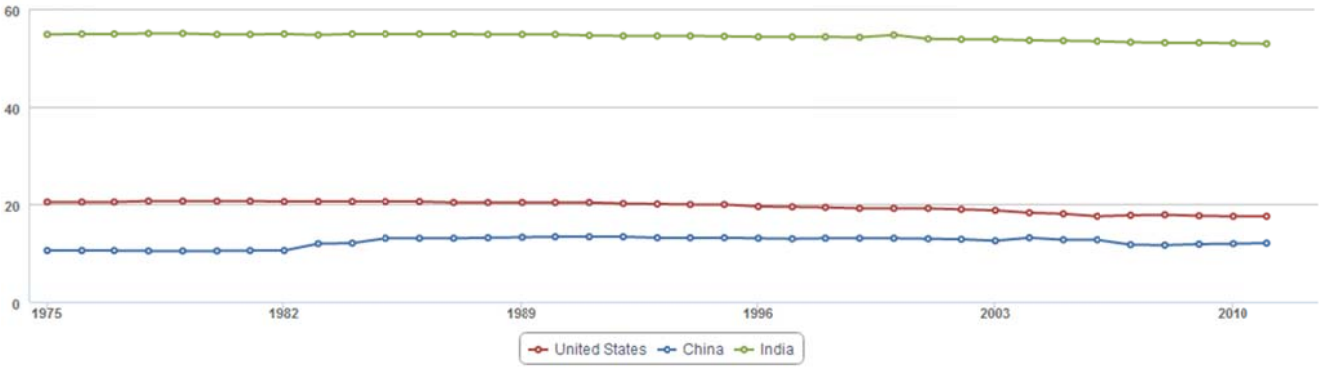
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

9.8 Rural population (% of total population), period: 1975-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

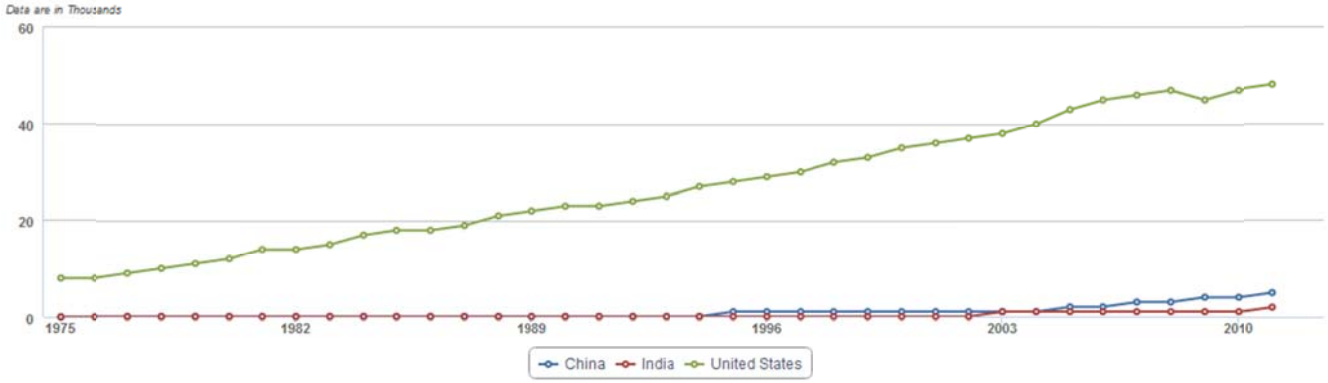
9.9 Arable land (% of land area), period: 1975-2011



Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

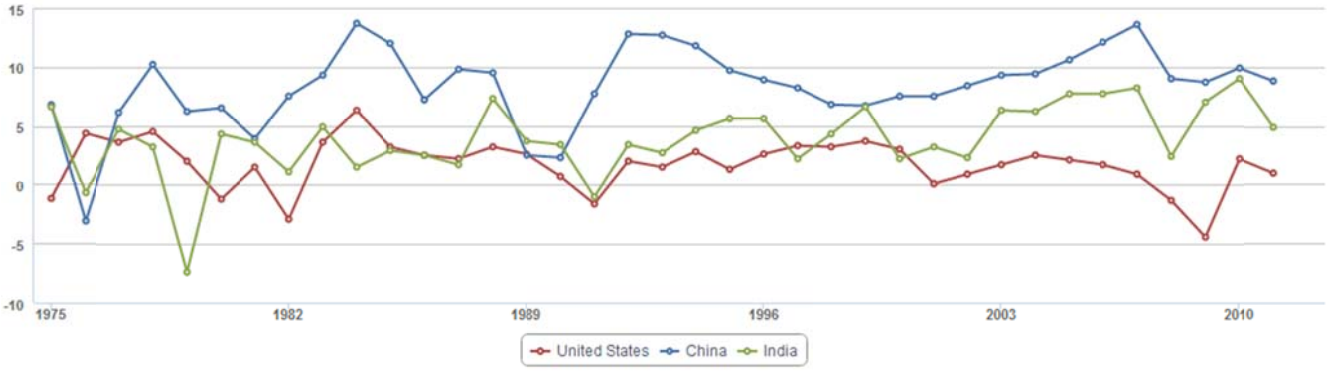
10. Poverty

10.1 GDP per capita (current US$)



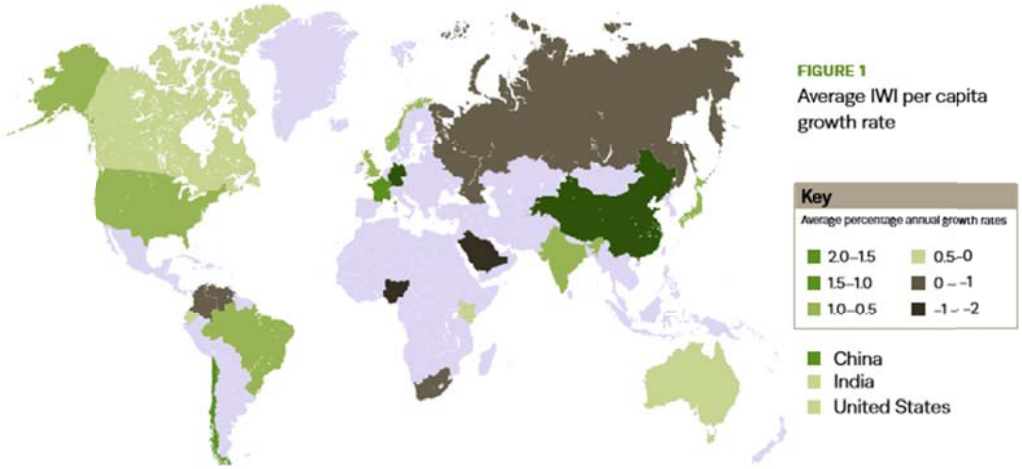
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

10.2 GDP per capita growth (annual %) period: 1975-2011



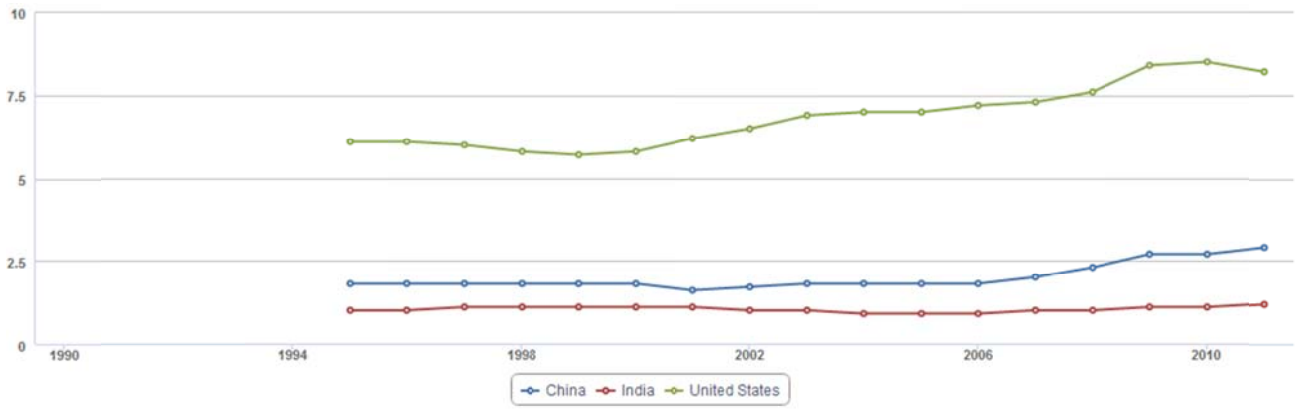
Source: http://databank.worldbank.org/data/views/reports/chart.aspx#

10.3 International Wealth Index



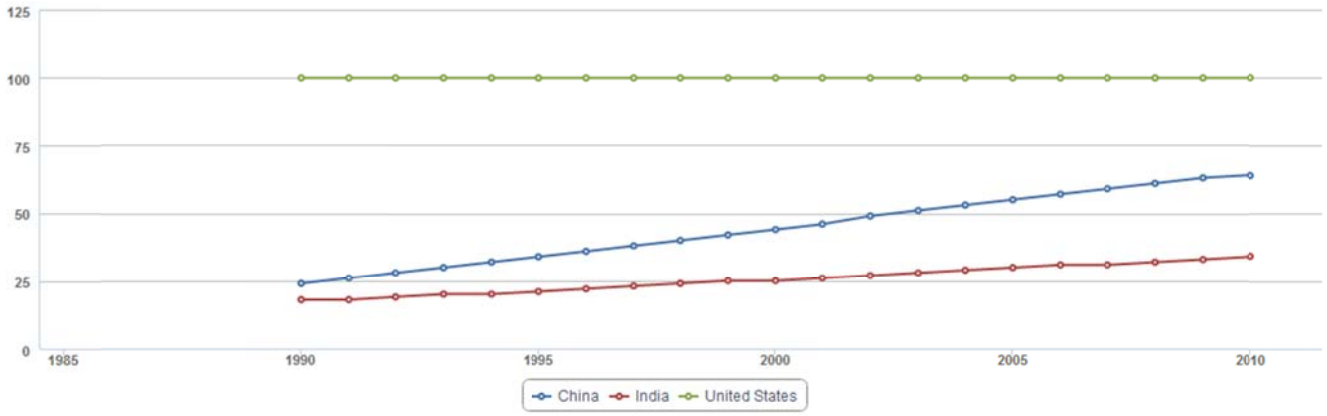
Source: http://www.ihdp.unu.edu/article/iwr

10.4 Health expenditure, public (% of GDP), period: 1995-2011



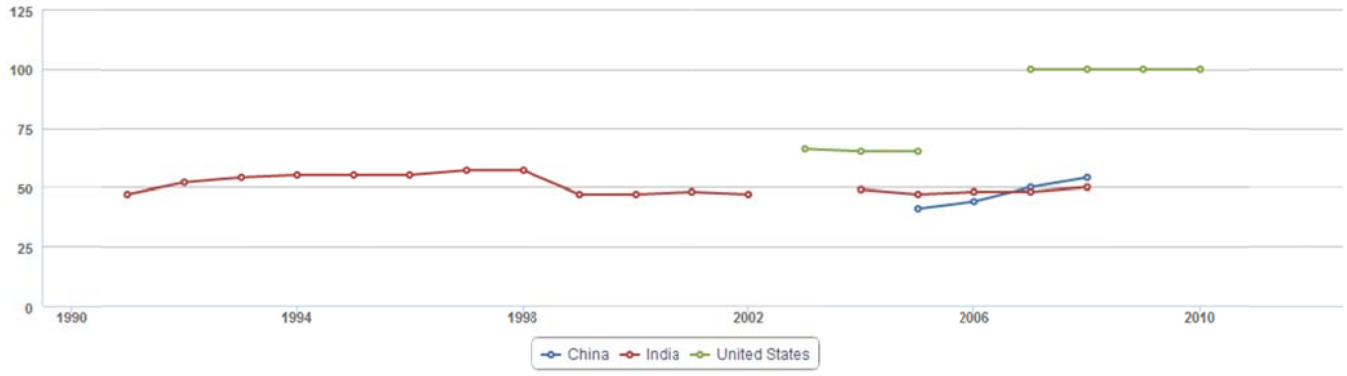
Source: *http://databank.worldbank.org/data/views/reports/chart.aspx#*

10.5 Improved sanitation facilities (% of population with access), period: 1990-2010



Source: *http://databank.worldbank.org/data/views/reports/chart.aspx#*

10.6 Roads, paved (% of total roads)



Source: *http://databank.worldbank.org/data/views/reports/chart.aspx*

11.Conclusions

In the Table of Conclusions below each indicator has a number associated, 0 for a negative performance and 1 for a positive performance of China. This number is obtained by assessing the information displayed in the previous graphs. The global indicator is defined as the number appearing more often in the corresponding column. The value of this indicator is considered a sign of improvement or deterioration of the economy.

For the socioeconomic and demographic variables we can see that China is better than India but not better than the U.S. The graphs show how in wealth terms China has nothing to do with the U.S., also in terms of life expectancy and mortality rate its performance is comparable. An important conclusion from the previous information is that, when China outstrips the U.S., it also outstrips India.

In education China is better than India in all aspects except for the number of university students; on the contrary, the U.S. is superior to China in all variables.

Macroeconomic view is a category that has developed through the years. In contrast to the soviet-style centrally planned economy, the new measures progressively were more market-oriented, reduced inefficiencies and stimulated private investment. As we can get from the tables, trade, exports and GDP growth are the variables that have won both countries. For FDI and imports, the U.S. has better results having the principal objective as the basis of comparison.

The technological development for China is an aspect that has to improve, it has been increasing percentages through the years but it yet remains below the numbers of the U.S.

In environment issues China has a lack of protected areas with respect to the U.S. and India. The emissions of CO2 are lower than in the U.S. but not lower than in India, aspect that should change for the wellbeing of the population. There has been an improvement of the water source. The levels compared to the ones in India are very close and both countries are close to reach the U.S. levels. As regards water pollution there cannot be a firm conclusion when taking into account both countries, as for India we do not have information. We can only say that apparently China has to improve its pollutant emissions in the textile industry. A reason of why this happens can be that the textile sector is the prevalent industry in China, and gives a big part of the exportation earnings.

China has a high money supply, which is a positive indicator in financial variables. Regarding currency, the objective was to have a high exchange rate with the U.S., which makes the country

more competitive in terms of exports, although India is has a higher exchange rate than China. Between the U.S and China there is not a difference in the aspects we have studied. That is why we cannot say China has to improve in general terms, as it is very similar to the U.S.

The category Industry vs. agriculture shows that China is going from a rural way of life into industry and urban life. It is considered a positive change, since it gives the country a better opportunity to sell abroad products that need a manufacturing

China has a lot of work to do in terms of poverty: it is superior to India but not to the U.S. Health care and investment should be improved to give the population a better wellbeing. Transportation facilities need improvement, as paved roads is an important factor for the country to be safer. The GDP distribution does not appear to be positive, but in the last years is becoming more similar to the U.S. distribution. Moreover, a significant fraction of the population is going from a low-class to a middle-class.

To conclude, the information depicted in the graphs suggests that China has made a lot of accomplishments and improvements in the last decades. Yet, the country needs a push in terms of wellbeing, because it is currently focusing the use of its resources in production and investment to earn more money, but the country would need more investment in education, health and environment.

Table of Conclusions

Socioeconomic and demographic variables	**0**	**1**	**Education**	**0**	**1**	**Macroeconomic view**	**0/1**	**1**	**Technological development**	**0**	**1**	**Environment**	**0/1**	**0**
	U.S.	India		U.S.	India		U.S.	India		U.S.	India		U.S.	India
Population pyramids	0	0	School enrolment, secondary (% gross)	0	1	Trade (% of GDP)	1	1	Electric power consumption (kWh)	0	1	CO2 emissions (metric tons per capita)	1	0
Gender inequality index (GII)	1	1	Expenditure in education (% of GDP)	0	1	Foreign direct investment, net outflows (% of GDP)	0	1	Electricity production (kWh)	0	1	Improved water source (% of population with access)	0	1
Life expectancy at birth, total (years)	0	1	Number of university students	0	0	Foreign direct investment, net inflows (% of GDP)	0	0	Alternative and nuclear energy (% of total energy use)	0	1	Marine protected areas (% of territorial waters)	0	0
Mortality rate, infant (per 1,000 live births)	0	1				Imports of goods and services (% of GDP)	0	1				Forest area (% of land area)	0	0
Population, total	1	1				Exports of goods and services (% of GDP)	1	1				Other greenhouse gas emissions (thousand metric tons of CO2)	1	0
Unemployment, total (% of total labour force)	1	1				GDP growth (annual %)	1	1				Water pollution, wood industry (% of BOD emissions)	1	-
Net migration	0	1										Water pollution, textile industry (% of BOD emissions)	0	-
Perception of corruption index	0	1										Water pollution, food industry (% of BOD emissions)	1	-
List by distribution of wealth, 2000	0	1												
Prosperity index	0	1												

Financial variables	0/1	1	Industry vs. agriculture	1	1	Poverty	0	1
	U.S.	India		U.S.	India		U.S.	India
M0 and M1	1	1	Employment in industry (% of total employment)	1	1	GDP per capita (current US$)	0	1
Broad money (% of GDP)	1	1	Industry, value added (% of GDP)	1	1	GDP per capita growth (annual %)	1	1
Inflation, GDP deflator (annual %)	1	0	Employment in agriculture (% of total employment)	0	1	International Wealth Index	1	1
Current account balance (% of GDP)	0	0	Agriculture, value added (% of GDP)	0	1	Health expenditure, public (% of GDP)	0	1
Currency	1	0	Urban population growth (annual %)	1	1	Improved sanitation facilities (% of population with access)	0	1
Real interest rate (%)	0	0	Urban population (% of total)	0	1	Roads, paved (% of total roads)	0	1
Lending interest rate (%)	0	1	Rural population growth (annual %)	1	1			
Market capitalization of listed companies (% GDP)	0	0	Rural population (% of total population)	1	0			
			Arable land (% of land area)	0	0			

12. Sources of information

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